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&lt;210&gt; 5218

&lt;211&gt; 541

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5218

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		20						25					30		
Ser	Thr	Leu	Arg	Cys	Cys	Ser	Gly	Asn	Ser	Ser	Asp	Trp	Leu	Gly	Gly
		35					40					45			
Ser	Pro	Gly	Ala	Ala	Pro	Gly	Thr	Leu	Cys	Cys	Phe	Leu	Trp	Pro	Arg
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Val	Gly	Thr	Gly	Leu	Cys	Pro	Gly	Leu	Ser	Leu	Pro	Gln	Pro	His	Leu
65					70					75				80	
Pro	His	Cys	Gln	Pro	Gln	Ser	Leu	Pro	Ala	Xaa	Ala	Arg	Val	Leu	Ser
			85						90					95	
Ser	Ser	Glu	Thr	Pro	Ala	Arg	Thr	Leu	Pro	Phe	Thr	Thr	Gly	Leu	Ile
		100						105						110	
Tyr	Asp	Ser	Val	Met	Leu	Lys	His	Gln	Cys	Ser	Cys	Gly	Asp	Asn	Ser



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Arg His Pro Glu His Ala Gly Arg Ile Gln Ser Ile Trp Ser Arg Leu		
130	135	140
Gln Glu Arg Gly Leu Arg Ser Gln Cys Glu Cys Leu Arg Gly Arg Lys		
145	150	155
Ala Ser Leu Glu Glu Leu Gln Ser Val His Ser Glu Arg His Val Leu		
165	170	175
Leu Tyr Gly Thr Asn Pro Leu Ser Arg Leu Lys Leu Asp Asn Gly Lys		
180	185	190
Leu Ala Gly Leu Leu Ala Gln Arg Met Phe Val Met Leu Pro Cys Gly		
195	200	205
Gly Val Gly Val Asp Thr Asp Thr Ile Trp Asn Glu Leu His Ser Ser		
210	215	220
Asn Ala Ala Arg Trp Ala Ala Gly Ser Val Thr Asp Leu Ala Phe Lys		
225	230	235
Val Ala Ser Arg Glu Leu Lys Asn Gly Phe Ala Val Val Arg Pro Pro		
245	250	255
Gly His His Ala Asp His Ser Thr Ala Met Gly Phe Cys Phe Phe Asn		
260	265	270
Ser Val Ala Ile Ala Cys Arg Gln Leu Gln Gln Gln Ser Lys Ala Ser		
275	280	285
Lys Ile Leu Ile Val Asp Trp Asp Val His His Gly Asn Ala Thr Gln		
290	295	300
Gln Thr Phe Tyr Gln Asp Pro Ser Val Leu Tyr Ile Ser Leu His Arg		
305	310	315
His Asp Asp Gly Asn Phe Phe Pro Gly Ser Gly Ala Val Asp Glu Val		
325	330	335
Gly Ala Gly Ser Gly Glu Gly Phe Asn Val Asn Val Ala Trp Ala Gly		
340	345	350
Gly Leu Asp Pro Pro Met Gly Asp Pro Glu Tyr Leu Ala Ala Phe Arg		
355	360	365
Ile Val Val Met Pro Ile Ala Arg Glu Phe Ser Pro Asp Leu Val Leu		
370	375	380
Val Ser Ala Gly Phe Asp Ala Ala Glu Gly His Pro Ala Pro Leu Gly		
385	390	395
Gly Tyr His Val Ser Ala Lys Cys Phe Gly Tyr Met Thr Gln Gln Leu		
405	410	415
Met Asn Leu Ala Gly Gly Ala Val Val Leu Ala Leu Glu Gly Gly His		
420	425	430
Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ala Ala Leu		
435	440	445
Leu Gly Asn Arg Val Asp Pro Leu Ser Glu Glu Gly Trp Lys Gln Lys		
450	455	460
Pro Asn Leu Asn Ala Ile Arg Ser Leu Glu Ala Val Ile Arg Val His		
465	470	475
Ser Lys Tyr Trp Gly Cys Met Gln Arg Leu Ala Ser Cys Pro Asp Ser		
485	490	495
Trp Val Pro Arg Val Pro Gly Ala Asp Lys Glu Glu Val Glu Ala Val		
500	505	510
Thr Ala Leu Ala Ser Leu Ser Val Gly Ile Leu Ala Glu Asp Arg Pro		
515	520	525
Ser Glu Gln Leu Val Glu Glu Glu Pro Met Asn Leu		
530	535	540

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<211> 1212  
<212> DNA  
<213> Homo sapiens

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180  
caaagagtga cgccccggagc tggagttagt gcggctacgg agccgatctt ggcgggccact  
240  
gggagtcctcg cggcggtgcc accggagaaa ctggaaggag ccggttcgag ctcagccccct  
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1212

<210> 5220  
<211> 179  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 5220

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Val Pro Pro Glu Lys Leu Glu Gly Ala Gly Ser Ser Ser Ala Pro Glu
      20           25           30
Arg Asn Cys Val Gly Ser Ser Leu Pro Glu Ala Ser Pro Pro Ala Pro
      35           40           45
Glu Pro Ser Ser Pro Asn Ala Ala Val Pro Glu Ala Ile Pro Thr Pro
      50           55           60
Arg Ala Ala Ala Ser Ala Ala Leu Glu Leu Pro Leu Gly Pro Ala Pro
      65           70           75           80
Val Ser Val Ala Pro Gln Ala Glu Ala Glu Ala Arg Ser Thr Pro Gly
      85           90           95
Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr Phe Arg Gln Arg Phe Arg
      100          105          110
Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro Arg Glu Ala Phe Arg Gln
      115          120          125
Leu Arg Glu Leu Ser Arg Gln Trp Leu Arg Pro Asp Ile Arg Thr Lys
      130          135          140
Glu Gln Ile Val Glu Met Leu Val Gln Glu Gln Leu Leu Ala Ile Leu
      145          150          155          160
Pro Glu Ala Ala Arg Ala Arg Arg Ile Arg Arg Arg Thr Asp Val Arg
      165          170          175

Ile Thr Gly

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&lt;210&gt; 5221

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5221

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&lt;210&gt; 5222

&lt;211&gt; 112

&lt;212&gt; PRT

<213> Homo sapiens

<400> 5222

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Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr Thr Gly
 20           25           30
Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg Asp Pro
 35           40           45
Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu Glu Gln
 50           55           60
Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile Ile Pro
 65           70           75           80
Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val Pro Gly
 85           90           95
Thr Lys Asp Asn Leu Met Arg Pro Pro Gly Met Thr Ser Ser Ser Gln
 100           105           110

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<210> 5223

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5223

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240
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300
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360
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420
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480
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540
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<210> 5224

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5224

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Xaa Thr Ile Phe Asp Asn Glu Ala Lys Asp Val Glu Arg Glu Val Cys

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Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro Glu Arg Tyr Tyr Lys Glu
                20           25           30
Ser Glu Asp Pro Lys His Phe Lys Ser Glu Lys Thr Gly Arg Gly Gln
                35           40           45
Leu Arg Glu Gly Trp Arg Asp Ser His Gln Pro Ile Met Cys Ser Tyr
                50           55           60
Lys Leu Val Thr Val Lys Phe Glu Val Trp Gly Leu Gln Thr Arg Val
65                70           75           80
Glu Gln Phe Val His Lys Val Val Arg Asp Ile Leu Leu Ile Gly His
                85           90           95
Arg Gln Ala Phe Ala Trp Val Asp Glu Trp Tyr Asp Met Thr Met Asp
                100           105           110
Asp Val Arg Glu Tyr Glu Lys Asn Met His Glu Gln Thr Asn Ile Lys
                115           120           125
Val Cys Asn Gln His Ser Ser Pro Val Asp Asp Ile Glu Ser His Ala
                130           135           140
Gln Thr Ser Thr
145

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<210> 5225  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

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 120  
 caggcctggt cagacggaca tgcccaagggt aacagatagt accaggacag gggaccctgg  
 180  
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 240  
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 300  
 tgtgaggaca cggtgggttc aggaagtgga gtgacaaatg ggctgtgctg gacttgcttt  
 360  
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 394

<210> 5226  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 5226  
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 Glu Pro Thr Val Ser Ser His Pro Leu Gly Asp Gly Gln Ser Pro Arg  
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 Phe Ala Ser His Ile Pro Ala Asp Pro Pro Cys Leu Pro Pro Gly Leu  
 35 40 45  
 Gly Gly Ala Val Ser Thr Gly Gly Gln Ala Ile Ala Pro Ser Asp Gln

50		55		60											
Gly	Pro	Leu	Ser	Trp	Tyr	Tyr	Leu	Phe	Pro	Trp	Ala	Cys	Pro	Ser	Asp
65					70					75					80
Gln	Ala	Cys	Gln	Asp	Ser	Ala	Tyr	Val	Ser	Pro	Ser	Pro	Ser	Ser	Ala
			85						90					95	
Leu	Gly	Pro	Ser	Leu	Pro	Gln	Pro	Gln	Leu	Pro	Pro	Pro	Gly	Ser	Pro
		100						105					110		
Pro															

<210> 5227  
 <211> 2366  
 <212> DNA  
 <213> Homo sapiens

<400> 5227  
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 300  
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 360  
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 420  
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 480  
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 600  
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 720  
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 1080  
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 1140

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 1980  
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 2160  
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 2340  
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 2366

<210> 5228  
 <211> 550  
 <212> PRT  
 <213> Homo sapiens

<400> 5228  
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 Ile Phe Leu Lys Gly Ile Met Glu Asn Pro Ile Val Lys Ser Leu Ala

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Lys Ala Arg Glu Arg Leu Glu Asp Ser Lys Leu Glu Ala Val Ser Asp
  50              55              60
Asn Asn Leu Glu Leu Val Asn Glu Ile Leu Glu Asp Ile Thr Pro Leu
65              70              75              80
Ile Asn Val Asp Glu Asn Val Ala Glu Leu Val Gly Ile Leu Lys Glu
      85              90              95
Pro His Phe Gln Ser Leu Leu Glu Ala His Asp Ile Val Ala Ser Lys
      100              105              110
Cys Tyr Asp Ser Pro Pro Ser Ser Pro Glu Met Asn Asn Ser Ser Ile
      115              120              125
Asn Asn Gln Leu Leu Pro Val Asp Ala Ile Arg Ile Leu Gly Ile His
      130              135              140
Lys Arg Ala Gly Glu Pro Leu Gly Val Thr Phe Arg Val Glu Asn Asn
145              150              155              160
Asp Leu Val Ile Ala Arg Ile Leu His Gly Gly Met Ile Asp Arg Gln
      165              170              175
Gly Leu Leu His Val Gly Asp Ile Ile Lys Glu Val Asn Gly His Glu
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Val Gly Asn Asn Pro Lys Glu Leu Gln Glu Leu Leu Lys Asn Ile Ser
      195              200              205
Gly Ser Val Thr Leu Lys Ile Leu Pro Ser Tyr Arg Asp Thr Ile Thr
      210              215              220
Pro Gln Gln Val Phe Val Lys Cys His Phe Asp Tyr Asn Pro Tyr Asn
225              230              235              240
Asp Asn Leu Ile Pro Cys Lys Glu Ala Gly Leu Lys Phe Ser Lys Gly
      245              250              255
Glu Ile Leu Gln Ile Val Asn Arg Glu Asp Pro Asn Trp Trp Gln Ala
      260              265              270
Ser His Val Lys Glu Gly Gly Ser Ala Gly Leu Ile Pro Ser Gln Phe
      275              280              285
Leu Glu Glu Lys Arg Lys Ala Phe Val Arg Arg Asp Trp Asp Asn Ser
      290              295              300
Gly Pro Phe Cys Gly Thr Ile Ser Ser Lys Lys Lys Lys Met Met
305              310              315              320
Tyr Leu Thr Thr Arg Asn Ala Glu Phe Asp Arg His Glu Ile Gln Ile
      325              330              335
Tyr Glu Glu Val Ala Lys Met Pro Pro Phe Gln Arg Lys Thr Leu Val
      340              345              350
Leu Ile Gly Ala Gln Gly Val Gly Arg Arg Ser Leu Lys Asn Arg Phe
      355              360              365
Ile Val Leu Asn Pro Thr Arg Phe Gly Thr Thr Val Pro Phe Thr Ser
      370              375              380
Arg Lys Pro Arg Glu Asp Glu Lys Asp Gly Gln Ala Tyr Lys Phe Val
385              390              395              400
Ser Arg Ser Glu Met Glu Ala Asp Ile Lys Ala Gly Lys Tyr Leu Glu
      405              410              415
His Gly Glu Tyr Glu Gly Asn Leu Tyr Gly Thr Lys Ile Asp Ser Ile
      420              425              430
Leu Glu Val Val Gln Thr Gly Arg Thr Cys Ile Leu Asp Val Asn Pro
      435              440              445
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<212> DNA
<213> Homo sapiens
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 35 40 45  
 Glu Lys Asn Glu Glu Glu Lys Gln Leu His Arg Lys Arg Ala Val Ser  
 50 55 60  
 Gln Val Pro Pro Thr Val Leu Cys Arg Glu Pro Val Gly Glu Ala Lys  
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845

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<211> 201

<212> PRT

<213> Homo sapiens

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Thr	Gly	Ser	Leu	Val	Asp	Gly	Arg	Ile	Ile	Asp	Thr	Ser	Leu	Thr	Arg
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Ile	Pro	Ser	His	Leu	Ala	Tyr	Gly	Lys	Arg	Gly	Phe	Pro	Pro	Ser	Val
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Tyr	Arg	Lys	Ala	Asn	Arg	Pro	Lys	Val	Ser	Lys	Lys	Lys	Leu	Lys	Glu
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<210> 5233

<211> 2801

<212> DNA

<213> Homo sapiens

<400> 5233

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&lt;210&gt; 5236

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5236

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Ala Ser Lys Lys Pro Lys Thr Ala Glu Ala Asp Thr Ser Ser Glu Leu			
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Ala Lys Lys Ser Lys Glu Val Phe Arg Lys Glu Met Ser Gln Phe Ile			
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Gly Val Met Asn Lys Glu Leu Lys Tyr Cys Lys Asn Pro Glu Asp Leu			
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Glu Cys Asn Glu Asn Val Lys His Lys Thr Lys Glu Tyr Ile Lys Lys			
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Tyr Met Gln Lys Phe Gly Ala Val Tyr Lys Pro Lys Glu Asp Thr Glu			
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Leu Glu			

&lt;210&gt; 5237

&lt;211&gt; 1238

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5237

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<210> 5238

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5238

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			20					25					30		
Leu	Leu	Gly	Ile	Tyr	Ile	Ile	His	Arg	Ala	Val	Arg	Asn	Pro	Asp	Asp
		35					40					45			
Leu	Glu	Ala	Arg	Ser	His	Met	His	Leu	Ala	Ser	Ala	Phe	Ala	Gly	Ile
	50					55					60				
Gly	Phe	Gly	Asn	Ala	Gly	Val	His	Leu	Cys	His	Gly	Met	Ser	Tyr	Pro
65					70					75					80
Ile	Ser	Gly	Leu	Val	Lys	Met	Tyr	Lys	Ala	Lys	Asp	Tyr	Asn	Val	Asp
			85					90						95	
His	Pro	Leu	Val	Pro	His	Gly	Leu	Ser	Val	Val	Leu	Thr	Ser	Pro	Ala
			100					105					110		
Val	Phe	Thr	Phe	Thr	Ala	Gln	Met	Phe	Pro	Glu	Arg	His	Leu	Glu	Met
		115					120					125			
Ala	Glu	Ile	Leu	Gly	Ala	Asp	Thr	Arg	Thr	Ala	Arg	Ile	Gln	Asp	Ala
		130					135				140				
Gly	Leu	Val	Leu	Ala	Asp	Thr	Leu	Arg	Lys	Phe	Leu	Phe	Asp	Leu	Asp
145					150					155				160	
Val	Asp	Asp	Gly	Leu	Ala	Ala	Val	Gly	Tyr	Ser	Lys	Ala	Asp	Ile	Pro
			165					170					175		
Ala	Leu	Val	Lys	Gly	Thr	Leu	Pro	Gln	Glu	Arg	Val	Thr	Lys	Leu	Ala
		180					185						190		
Pro	Arg	Pro	Gln	Ser	Glu	Glu	Asp	Leu	Ala	Ala	Leu	Phe	Glu	Ala	Ser
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Met	Lys	Leu	Tyr												
		210													

<210> 5239  
<211> 2061  
<212> DNA  
<213> Homo sapiens

<400> 5239  
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180  
ggctctagta ctccaccttt gagctgccat gcccaatagg ggaagtccaa aattaaaaat  
240  
acaaccggtg tagaagaaaa taaatgggga gtgaaataga agaaaagatg agggagggga  
300  
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360  
ctgaccacaga aagtgatggt ggcagggtcca agagacagag attatgtgtc gggacacaga  
420  
cagcctccca tccccaaccg taatggattc aatttcaagt ccacagagtg gggaggaagg  
480  
atagggtggg aaagtgagac actcattttc aaacaagtct cccttgagaa ttctgcctt  
540  
gaagtgcaga cagtatccaa gctccagggg ataggctgag gaccctgagg ctcagttccc  
600  
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660  
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720  
aagaagtcgg ggacgttggt cttcttaatc ttagcacagg agagggtgat ccacgtccca  
780  
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1140  
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1320  
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1380  
cgggagggtat gtgtcagggg tgtggggggc aaaggagatg ccactttggg cccatccaga  
1440

tcaaagagag agtccttgag cttcatcttc tcaagcaagg tagcactgtc gggggcctgc  
 1500  
 agacgagaga aagtggacct tgggggtcct ggctgggtgg gacctgcttg agctgccctt  
 1560  
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 1620  
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 1680  
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 1740  
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 1860  
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 1920  
 ctagtgtcg atgtccac tgcttcgctc cacagaagtg tccgcctcag cccggttgag  
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 actcgagtcc gctagccgt gccgccacct ccctctacca ctgcctccg cactcccgga  
 2040  
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 2061

&lt;210&gt; 5240

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5240

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Ser	Pro	Ser	Trp	Leu	Val	Ser	Val	Leu	Pro	Thr	Ser	Leu	Leu	Ser	Leu
			20					25					30		
Ser	Ala	Gly	Gly	Thr	Pro	Ser	Gly	Cys	Thr	Val	Ala	Gly	Gly	Leu	Gly
		35					40					45			
Ala	Ser	Gly	Gly	Val	Gly	Ser	Thr	Gly	Thr	Gly	Ala	Ser	Pro	Pro	Thr
	50					55					60				
Thr	Val	Ala	Ile	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
				70					75					80	
Ser	Ser	Glu	Ser	Val	Ser	Leu	Gly	Gly	Ala	Trp	Gly	Gly	Pro	Gly	Gly
			85						90					95	
Gly	Ser	Leu	Ser	Pro	Arg	Ser	Ala	Phe	Phe	Asn	Phe	Arg	Phe	Leu	Leu
			100					105					110		
Phe	Leu	Ile	Arg	Asp	Leu	Phe	Ser	Pro	Ser	Pro	Gly	Val	Gly	Arg	Gly
		115					120					125			
Leu	Arg	Ser	Thr	Pro	Lys	Pro	Ala	Pro	Ala	Pro	Gly	Pro	Asn	Phe	Arg
			130				135					140			
Phe	Phe	Arg	Ser	Phe	Phe	Arg	Gly	Gly	Trp	Glu	Arg	Ser	Pro	Trp	Glu
				150						155				160	
Arg	Gly	Thr	Gly	Val	Arg	Ala	Ala	Gly	Gly	Arg	Glu	Val	Cys	Val	Arg
			165						170					175	
Asp	Val	Gly	Asp	Lys	Gly	Asp	Ala	Thr	Leu	Gly	Pro	Ser	Arg	Ser	Lys
			180					185					190		
Arg	Glu	Ser	Leu	Ser	Phe	Ile	Phe	Ser	Ser	Lys	Val	Ala	Leu	Ser	Gly

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 Ala Cys Arg Arg Glu Lys Val Asp Leu Gly Gly Pro Gly Trp Val Gly  
 210                      215                      220  
 Pro Ala  
 225

<210> 5241  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

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 ccctcaatat gccgggggtg taccatttcc caagggatga cagcagggcc ccacagcgag  
 120  
 ccccaggctg atccggagcc ctcttcatcc ccgtccaggg ccgtttgcac tgctcccggc  
 180  
 atcggcacac cttgttcttg ttgtgctggg acggcagcgc cccgtgaggt cagaggggtg  
 240  
 ctgtcacatc tgccaccag tgtggtctcc tggagatttc agtggttcgg tgcttcgctt  
 300  
 ctcacctggc cagctctgag ttcagcctct cgctgtggg gacccctgca tcctggcggc  
 360  
 agaaggagga ggaagaagcc accagaggtt gccaggaacc cagtggcagg ggaggtgggg  
 420  
 ctgagccagg cccgcccgt gtgccgggag ttcccacgcg g  
 461

<210> 5242  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 5242  
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 Cys Arg Gly Cys Thr His Phe Gln Gly Met Thr Ala Gly Pro His Ser  
 20                      25                      30  
 Glu Pro Gln Ala Asp Pro Glu Pro Ser Ser Ser Pro Ser Arg Ala Val  
 35                      40                      45  
 Cys Thr Ala Pro Gly Ile Gly Thr Pro Cys Ser Gly Cys Ala Gly Thr  
 50                      55                      60  
 Ala Ala Pro Arg Glu Val Arg Gly Leu Leu Ser His Leu Pro Pro Ser  
 65                      70                      75                      80  
 Val Val Ser Trp Arg Phe Gln Trp Phe Gly Ala Ser Leu Leu Thr Trp  
 85                      90                      95  
 Pro Ala Leu Ser Ser Ala Ser Arg Leu Trp Gly Pro Leu His Pro Gly  
 100                      105                      110  
 Gly Arg Arg Arg Arg Lys Lys Pro Pro Glu Val Ala Arg Asn Pro Val  
 115                      120                      125  
 Ala Gly Glu Val Gly Leu Ser Gln Ala Arg Pro Leu Cys Arg Glu Phe  
 130                      135                      140  
 Pro Arg

145

<210> 5243  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 5243  
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 60  
 tggctggacc ttacagacga gccatttggg cagaaggtaa ctgtggaccc tgacaactca  
 120  
 aattgcagtg aagaaagtgc taggttgtct ttgaagcttg gtgatgctgg aaacccaga  
 180  
 agtcttgcta taagattcat ccttaccaat tacaacaagt tgtccatcca gagttggttt  
 240  
 agtttgcgcc gagtcgagat cattccaac aattcaatcc aagcagtctt taacccaact  
 300  
 ggcgtatatg ctccctctgg ttactcctac cgctgccaac gcgt  
 344

<210> 5244  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 5244  
 Xaa Ile Pro Cys Ile Leu Phe Trp Ala Lys Arg Ile Met Ile Lys Phe  
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 Lys Asn Gln Thr Trp Leu Asp Leu Thr Asp Glu Pro Phe Gly Gln Lys  
 20 25 30  
 Val Thr Val Asp Pro Asp Asn Ser Asn Cys Ser Glu Glu Ser Ala Arg  
 35 40 45  
 Leu Ser Leu Lys Leu Gly Asp Ala Gly Asn Pro Arg Ser Leu Ala Ile  
 50 55 60  
 Arg Phe Ile Leu Thr Asn Tyr Asn Lys Leu Ser Ile Gln Ser Trp Phe  
 65 70 75 80  
 Ser Leu Arg Arg Val Glu Ile Ile Ser Asn Asn Ser Ile Gln Ala Val  
 85 90 95  
 Phe Asn Pro Thr Gly Val Tyr Ala Pro Ser Gly Tyr Ser Tyr Arg Cys  
 100 105 110  
 Gln Arg

<210> 5245  
 <211> 483  
 <212> DNA  
 <213> Homo sapiens

<400> 5245  
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 ctccggccgg ctaagccgcg ggggacaact atgctgaaag ccaagatcct cttcgtgggg  
 120

ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact  
 180  
 gaatacagcc caacccaagg agtgagggtt gagtcctgct ggccggccct gatgaaggat  
 240  
 gctcatggag tggatgatcgt cttcaatgct gacatcccaa gccaccggaa ggaaatggag  
 300  
 atgtggtatt cctgctttgt ccaacagccg tccttacagg acacacagtg tatgctaatt  
 360  
 gcacaccaca aaccaggctc tggagatgat aaaggaagcc tgtctttgtc gccacccttg  
 420  
 aacaagctga agctggtgca ctcaaacctg gaagatgacc ctgaggagat ccggatggaa  
 480  
 ttc  
 483

<210> 5246  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 5246  
 Met Leu Lys Ala Lys Ile Leu Phe Val Gly Pro Cys Glu Ser Gly Lys  
 1 5 10 15  
 Thr Val Leu Ala Asn Phe Leu Thr Glu Ser Ser Asp Ile Thr Glu Tyr  
 20 25 30  
 Ser Pro Thr Gln Gly Val Arg Phe Glu Ser Cys Trp Pro Ala Leu Met  
 35 40 45  
 Lys Asp Ala His Gly Val Val Ile Val Phe Asn Ala Asp Ile Pro Ser  
 50 55 60  
 His Arg Lys Glu Met Glu Met Trp Tyr Ser Cys Phe Val Gln Gln Pro  
 65 70 75 80  
 Ser Leu Gln Asp Thr Gln Cys Met Leu Ile Ala His His Lys Pro Gly  
 85 90 95  
 Ser Gly Asp Asp Lys Gly Ser Leu Ser Leu Ser Pro Pro Leu Asn Lys  
 100 105 110  
 Leu Lys Leu Val His Ser Asn Leu Glu Asp Asp Pro Glu Glu Ile Arg  
 115 120 125  
 Met Glu Phe  
 130

<210> 5247  
 <211> 1004  
 <212> DNA  
 <213> Homo sapiens

<400> 5247  
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 ctccggccgg ctaagccgcg gcggacaact atgctgaaag ccaagatcct ctccgtgggg  
 120  
 ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact  
 180  
 gaatacagcc caacccaagg agtgaggatc ctagaatttg agaaccgcga tgttaccagc  
 240

aacaacaaag gcacgggctg tgaattcgag ctatgggact gtgggtggcga tgctaagttt  
300  
gagtcctgct ggccggccct gatgaaggat gctcatggag tggatgatcgt cttcaatgct  
360  
gacatcccaa gccaccggaa ggaaatggag atgtgggtatt cctgctttgt ccaacagccg  
420  
tccttacagg acacacagtg tatgctaatt gcacaccaca aaccaggctc tggagatgat  
480  
aaaggaagcc tgtctttgtc gccacccttg aacaagctga agctgggtgca ctcaaacctg  
540  
gaagatgacc ctgaggagat ccggatggaa ttcataaagt atttaaaaag cataatcaac  
600  
tccatgtctg agagcagaga cagggaggag atgtcaatta tgacctagcc agccttcacc  
660  
tgggactgcc acatccccag tgaaatcagc atgtttctcg gtgcagatct gaaatcacat  
720  
ccagctcctg atgttttctt ctccctctga ctgcagagga agtggttcta cctgcaggaa  
780  
ggcacctgtc acacagggcg ttcactcaga ccatctgtgc tctgcctga gttcagttga  
840  
gaaaatccta ttatcaaatt tggatttctt ggccccagaa cttcccaaag acctgtaaaa  
900  
tggagggatt taccacctca catatgtcca gttaaacagt ttgtggactt gtaaccgtcg  
960  
cagcccaatg atacaacagt agtttaatca cgtgaaaaaa aaaa  
1004

&lt;210&gt; 5248

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5248

Met	Leu	Lys	Ala	Lys	Ile	Leu	Phe	Val	Gly	Pro	Cys	Glu	Ser	Gly	Lys
1				5					10					15	
Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr
		20						25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Ile	Leu	Glu	Phe	Glu	Asn	Pro	His	Val
		35					40					45			
Thr	Ser	Asn	Asn	Lys	Gly	Thr	Gly	Cys	Glu	Phe	Glu	Leu	Trp	Asp	Cys
	50					55					60				
Gly	Gly	Asp	Ala	Lys	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met	Lys	Asp
65					70					75				80	
Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser	His	Arg
			85						90					95	
Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro	Ser	Leu
		100						105					110		
Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly	Ser	Gly
	115					120						125			
Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys	Leu	Lys
	130					135					140				
Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg	Met	Glu
145				150					155					160	
Phe	Ile	Lys	Tyr	Leu	Lys	Ser	Ile	Ile	Asn	Ser	Met	Ser	Glu	Ser	Arg

165 170 175  
 Asp Arg Glu Glu Met Ser Ile Met Thr  
 180 185  
 <210> 5249  
 <211> 653  
 <212> DNA  
 <213> Homo sapiens  
 <400> 5249  
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 taccgggggct ggctagtcac gggggagccc agtagagagg agtataaaat ccagtccttt  
 120  
 gatgcagaga cccagcagct gctgaagaca gcactcaaag atccgggtgc tgtggacttg  
 180  
 gagaaaagtgg ccaatgtgat tgtggacccat tctctgcagg actgtgtgtt cagcaaggaa  
 240  
 gcaggacgca tgtgctacgc catcattcag gcagagagta aacaagcagg ccagagtgtc  
 300  
 ttccgacgtg gactcctcaa ccggctgcag caggagtacc aggcctcgga gcagctgcga  
 360  
 gcacgctccc tgcagggtcg ggtctgctat gtcaccttta tctgcaacat ctttgactac  
 420  
 ctgaggggtga acaacatgcc catgatggcc ctggtgaacc ctgtctatga ctgcctcttc  
 480  
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 540  
 ctgcaccggg ttggggagca gctggagaaa atgaatgggc agcgcattgga tgagctcttt  
 600  
 gtgctgatcc gggatggctt cctgctccca actggcctca gctccctggc cca  
 653

<210> 5250  
 <211> 217  
 <212> PRT  
 <213> Homo sapiens

<400> 5250  
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 Pro Val Lys Ser Tyr Arg Gly Trp Leu Val Met Gly Glu Pro Ser Arg  
 20 25 30  
 Glu Glu Tyr Lys Ile Gln Ser Phe Asp Ala Glu Thr Gln Gln Leu Leu  
 35 40 45  
 Lys Thr Ala Leu Lys Asp Pro Gly Ala Val Asp Leu Glu Lys Val Ala  
 50 55 60  
 Asn Val Ile Val Asp His Ser Leu Gln Asp Cys Val Phe Ser Lys Glu  
 65 70 75 80  
 Ala Gly Arg Met Cys Tyr Ala Ile Ile Gln Ala Glu Ser Lys Gln Ala  
 85 90 95  
 Gly Gln Ser Val Phe Arg Arg Gly Leu Leu Asn Arg Leu Gln Gln Glu  
 100 105 110  
 Tyr Gln Ala Arg Glu Gln Leu Arg Ala Arg Ser Leu Gln Gly Trp Val



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      115              120              125
Cys Tyr Val Thr Phe Ile Cys Asn Ile Phe Asp Tyr Leu Arg Val Asn
      130              135              140
Asn Met Pro Met Met Ala Leu Val Asn Pro Val Tyr Asp Cys Leu Phe
145              150              155              160
Arg Leu Ala Gln Pro Asp Ser Leu Ser Lys Glu Glu Glu Val Asp Cys
      165              170              175
Leu Val Leu Gln Leu His Arg Val Gly Glu Gln Leu Glu Lys Met Asn
      180              185              190
Gly Gln Arg Met Asp Glu Leu Phe Val Leu Ile Arg Asp Gly Phe Leu
      195              200              205
Leu Pro Thr Gly Leu Ser Ser Leu Ala
      210              215

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<210> 5251  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

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<400> 5251
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caccacagcg ggacggcact tcattatgac gatgtcccgt gcatcaacgg ctcggggggaa
120
ccggaagacg gcttttcctgc tttctgcagc agaagcttgg gagaagaagg ggcttttgaa
180
aaccacaggcc tgtacgataa ctggccgcct ccgcacatct ttgcccgccta ctctcctgct
240
gacagaaagg cctctaggct gtctgctgac aagctgtcct ctaaccatta caaataccct
300
gcctctgctc agtctgtcac taatacctct tctgtgggga gggcgtctct cgggctcaac
360
tcgcagcctc ag
372

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<210> 5252  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

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<400> 5252
Met Asn Arg Arg Val Ile Ser Ala Asn Pro Tyr Leu Gly Gly Thr Ser
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Asn Gly Tyr Ala His Pro Ser Gly Thr Ala Leu His Tyr Asp Asp Val
      20              25              30
Pro Cys Ile Asn Gly Ser Gly Glu Pro Glu Asp Gly Phe Pro Ala Phe
      35              40              45
Cys Ser Arg Ser Leu Gly Glu Gly Ala Phe Glu Asn Pro Gly Leu
      50              55              60
Tyr Asp Asn Trp Pro Pro His Ile Phe Ala Arg Tyr Ser Pro Ala
      65              70              75              80
Asp Arg Lys Ala Ser Arg Leu Ser Ala Asp Lys Leu Ser Ser Asn His
      85              90              95
Tyr Lys Tyr Pro Ala Ser Ala Gln Ser Val Thr Asn Thr Ser Ser Val

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100                                      105                                      110  
 Gly Arg Ala Ser Leu Gly Leu Asn Ser Gln Pro Gln  
           115                                      120

<210> 5253  
 <211> 898  
 <212> DNA  
 <213> Homo sapiens

<400> 5253  
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 ccacagtgc tttccagtcc agcaaagga aatctgggga gtctatactt tgctcacaac  
 120  
 tcattctaat gccatccttg tggagagcca cagtgtagtg caagggtcca tccaattcac  
 180  
 tgtggacaag gtcttgagc aacatcacca ggctgccaag gctcagcaga aactacaggc  
 240  
 ctactctca gtggctgtga actccatcat gagtattctg actggaagca ctaggagcag  
 300  
 cttccgaaag atgtgtctcc agacccttca agcagctgac acacaagagt tcaggaccaa  
 360  
 actgcacaaa gtatttcgtg agatcaccca acaccaattt cttcaccact gctcatgtga  
 420  
 ggtgaagcag cagctaaccc tagaaaaaaaa ggactcagcc cagggcactg aggacgcacc  
 480  
 tgataacagc agcctggagc tcctagcaga taccagcggg caagcagaaa acaagaggct  
 540  
 caagaggggc agccccgc tagaggagat gcgagctctg cgctctgccca gggccccgag  
 600  
 cccgtcagag gccgccccgc gccgcccga agccaccgcg gccccctca ctctagagg  
 660  
 aaggagcac cgcgaggctc acggcagggc cctggcgccg ggcagggcga gcctcggaag  
 720  
 ccgcctggag gacgtgctgt ggctgcagga ggtctccaac ctgtcagagt ggctgagtcc  
 780  
 cagccctggg ccctgagccg ggtccccttc cgcaagcgcc caccgatccg gaggtgcgg  
 840  
 gcagccgtta tcccgtggtt taataaagct gccgcgcgct caaaaaaaaa aaaaaaaaa  
 898

<210> 5254  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 5254  
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           20                  25                  30  
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<211> 1410  
<212> DNA  
<213> Homo sapiens

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<210> 5256  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 5256  
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35 40 45  
Ala Ser Pro His Phe Thr Ala Ser Ser Ile Pro Leu Pro Pro Ser Arg  
50 55 60  
Arg Ile Val Pro Arg Ala Val Phe Leu Gln Gly Val Arg Gly Ile Thr  
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His Ser Trp Arg Leu Ala Arg Arg Gln Ser Glu Ala Arg Asp Thr  
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<210> 5257  
<211> 1366  
<212> DNA  
<213> Homo sapiens

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<210> 5258

<211> 375

<212> PRT

<213> Homo sapiens

<400> 5258

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Ser	Tyr	Ser	Ala	Ser	Ala	Glu	Pro	Ala	Arg	Val	Arg	Gly	Leu	Val	Tyr
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Pro	Ile	Asn	Pro	Ser	Asp	Ile	Asn	Met	Ile	Gln	Gly	Asn	Tyr	Gly	Leu
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Ala	Ser	Asn	Ser	Gly	Val	Gly	Gln	Ala	Val	Ile	Gln	Ile	Ala	Ala	Ala
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Leu	Gly	Leu	Arg	Thr	Ile	Asn	Val	Val	Arg	Asp	Arg	Pro	Asp	Ile	Gln

210	215	220
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	245	250
Pro Gln Pro Arg Leu Ala Leu Asn Cys Val Gly Gly Lys Ser Ser Thr		255
	260	265
Glu Leu Leu Arg Gln Leu Ala Arg Gly Gly Thr Met Val Thr Tyr Gly		270
	275	280
Gly Met Ala Lys Gln Pro Val Val Ala Ser Val Ser Leu Leu Ile Phe		285
	290	295
Lys Asp Leu Lys Leu Arg Gly Phe Trp Leu Ser Gln Trp Lys Lys Asp		300
305	310	315
His Ser Pro Asp Gln Phe Lys Glu Leu Ile Leu Thr Leu Cys Asp Leu		320
	325	330
Ile Arg Arg Gly Gln Leu Thr Ala Pro Ala Cys Ser Gln Val Pro Leu		335
	340	345
Gln Asp Tyr Gln Ser Ala Leu Glu Ala Ser Met Lys Pro Phe Ile Ser		350
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Ser Lys Gln Ile Leu Thr Met		365
370	375	

&lt;210&gt; 5259

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5259

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306

&lt;210&gt; 5260

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5260

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35 40 45

Asp Asp Tyr Gly Thr Glu Leu Leu Arg Arg Tyr His Glu Asn Leu Ser

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Glu Ile Phe Thr Asp Asn Gln Ile Leu Leu Lys Met Ile Ser His Met				
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Thr Ser Leu				80

&lt;210&gt; 5261

&lt;211&gt; 2394

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5261

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&lt;210&gt; 5262

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5262

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Ala	Glu	Arg	Pro	Leu	Gln	Asp	Glu	Pro	Ala	Ala	Ala	Ala	Ala	Gly	Pro
			20					25					30		
Gly	Lys	Gly	Arg	Phe	Leu	Val	Arg	Ile	Cys	Phe	Gln	Gly	Asp	Glu	Gly
		35					40					45			
Ala	Cys	Pro	Thr	Arg	Asp	Phe	Val	Val	Gly	Ala	Leu	Ile	Leu	Arg	Ser
	50					55					60				



Ile Gly Met Asp Pro Ser Asp Ile Tyr Ala Val Ile Gln Ile Pro Gly  
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 Phe Leu Arg Val Tyr Glu Glu Lys Arg Glu Gln Glu Asp Cys Trp Glu  
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 Asn Phe Val Val Leu Gly Arg Ser Lys Ser Ser Leu Lys Thr Leu Phe  
 115 120 125  
 Ile Leu Phe Arg Asn Glu Thr Val Asp Val Glu Asp Ile Val Thr Trp  
 130 135 140  
 Leu Lys Arg His Cys Asp Val Leu Ala Val Pro Val Lys Val Thr Asp  
 145 150 155 160  
 Arg Phe Gly Ile Trp Thr Gly Glu Tyr Lys Cys Glu Ile Glu Leu Arg  
 165 170 175  
 Gln Gly Glu Gly Gly Val Arg His Leu Pro Gly Ala Phe Phe Leu Gly  
 180 185 190  
 Ala Glu Arg Gly Tyr Ser Trp Tyr Lys Gly Gln Pro Lys Thr Cys Phe  
 195 200 205  
 Lys Cys Gly Ser Arg Thr His Met Ser Gly Ser Cys Thr Gln Asp Arg  
 210 215 220  
 Cys Phe Arg Cys Gly Glu Gly His Leu Ser Pro Tyr Cys Arg Lys  
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 <213> Homo sapiens

<400> 5264

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 Trp His Phe Asn Ile Asn Gln Lys Arg Phe Ser Lys Ala Gln Pro Thr  
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 Cys Phe Leu Leu Ile Leu Pro Cys Gln Lys Ile Met Cys Ile Tyr  
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&lt;210&gt; 5265

&lt;211&gt; 3203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5265

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2520  
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 2640  
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 2820  
 agcatcctgc cgcccaaagc cgctcttct cagttgcaa acgagggggc tgccccccgc  
 2880  
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 2940  
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 3000  
 aggtgcccc ctcccagatg ccctggcctc aggcctgact ccggccagga gggtcagaag  
 3060  
 aaggacaaag gggagagctg ggacaaggcc ttgccccctt cctgccatct cccaaccca  
 3120  
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 3180  
 ttgtaaaaaa aaaaaaaaaa aaa  
 3203

&lt;210&gt; 5266

&lt;211&gt; 853

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5266

Met	Gly	Thr	Pro	Arg	Ala	Gln	His	Pro	Pro	Pro	Pro	Gln	Leu	Leu	Phe
1				5				10					15		
Leu	Ile	Leu	Leu	Ser	Cys	Pro	Trp	Ile	Gln	Gly	Leu	Pro	Leu	Lys	Glu
		20						25					30		
Glu	Glu	Ile	Leu	Pro	Glu	Pro	Gly	Ser	Glu	Thr	Pro	Thr	Val	Ala	Ser
		35					40					45			
Glu	Ala	Leu	Ala	Glu	Leu	Leu	His	Gly	Ala	Leu	Leu	Arg	Arg	Gly	Pro
		50				55					60				
Glu	Met	Gly	Tyr	Leu	Pro	Gly	Pro	Pro	Leu	Gly	Pro	Glu	Gly	Gly	Glu
65					70				75						80
Glu	Glu	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Thr	Val	Thr	Thr	Thr
			85					90					95		
Val	Thr	Ser	Pro	Val	Leu	Cys	Asn	Asn	Asn	Ile	Ser	Glu	Gly	Glu	Gly
			100				105						110		
Tyr	Val	Glu	Ser	Pro	Asp	Leu	Gly	Ser	Pro	Val	Ser	Arg	Thr	Leu	Gly
		115				120					125				
Leu	Leu	Asp	Cys	Thr	Tyr	Ser	Ile	His	Val	Tyr	Pro	Gly	Tyr	Gly	Ile
		130				135					140				
Glu	Ile	Gln	Val	Gln	Thr	Leu	Asn	Leu	Ser	Gln	Glu	Glu	Glu	Leu	Leu
145					150				155						160
Val	Leu	Ala	Gly	Gly	Gly	Ser	Pro	Gly	Leu	Ala	Pro	Arg	Leu	Leu	Ala
			165					170					175		
Asn	Ser	Ser	Met	Leu	Gly	Glu	Gly	Gln	Val	Leu	Arg	Ser	Pro	Thr	Asn
			180				185					190			
Arg	Leu	Leu	Leu	His	Phe	Gln	Ser	Pro	Arg	Val	Pro	Arg	Gly	Gly	Gly

		195					200					205			
Phe	Arg	Ile	His	Tyr	Gln	Ala	Tyr	Leu	Leu	Ser	Cys	Gly	Phe	Pro	Pro
	210					215					220				
Arg	Pro	Ala	His	Gly	Asp	Val	Ser	Val	Thr	Asp	Leu	His	Pro	Gly	Gly
225					230					235					240
Thr	Ala	Thr	Phe	His	Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly	Glu	Glu
				245					250					255	
Thr	Leu	Ile	Cys	Leu	Asn	Gly	Thr	Arg	Pro	Ser	Trp	Asn	Gly	Glu	Thr
			260				265						270		
Pro	Ser	Cys	Met	Ala	Ser	Cys	Gly	Gly	Thr	Ile	His	Asn	Ala	Thr	Leu
		275					280					285			
Gly	Arg	Ile	Val	Ser	Pro	Glu	Pro	Gly	Gly	Ala	Val	Gly	Pro	Asn	Leu
	290					295					300				
Thr	Cys	Arg	Trp	Val	Ile	Glu	Ala	Ala	Glu	Gly	Arg	Arg	Leu	His	Leu
305					310					315					320
His	Phe	Glu	Arg	Val	Ser	Leu	Asp	Glu	Asp	Asn	Asp	Arg	Leu	Met	Val
				325					330					335	
Arg	Ser	Gly	Gly	Ser	Pro	Leu	Ser	Pro	Val	Ile	Tyr	Asp	Ser	Asp	Met
			340					345					350		
Asp	Asp	Val	Pro	Glu	Arg	Gly	Leu	Ile	Ser	Asp	Ala	Gln	Ser	Leu	Tyr
		355					360					365			
Val	Glu	Leu	Leu	Ser	Glu	Thr	Pro	Ala	Asn	Pro	Leu	Leu	Leu	Ser	Leu
	370					375					380				
Arg	Phe	Glu	Ala	Phe	Glu	Glu	Asp	Arg	Cys	Phe	Ala	Pro	Phe	Leu	Ala
385					390					395					400
His	Gly	Asn	Val	Thr	Thr	Thr	Asp	Pro	Glu	Tyr	Arg	Pro	Gly	Ala	Leu
				405					410					415	
Ala	Thr	Phe	Ser	Cys	Leu	Pro	Gly	Tyr	Ala	Leu	Glu	Pro	Pro	Gly	Pro
			420					425					430		
Pro	Asn	Ala	Ile	Glu	Cys	Val	Asp	Pro	Thr	Glu	Pro	His	Trp	Asn	Asp
		435					440					445			
Thr	Glu	Pro	Ala	Cys	Lys	Ala	Met	Cys	Gly	Gly	Glu	Leu	Ser	Glu	Pro
	450					455					460				
Ala	Gly	Val	Val	Leu	Ser	Pro	Asp	Trp	Pro	Gln	Ser	Tyr	Ser	Pro	Gly
465					470					475					480
Gln	Asp	Cys	Val	Trp	Gly	Val	His	Val	Gln	Glu	Glu	Lys	Arg	Ile	Leu
				485					490					495	
Leu	Gln	Val	Glu	Ile	Leu	Asn	Val	Arg	Glu	Gly	Asp	Met	Leu	Thr	Leu
			500					505					510		
Phe	Asp	Gly	Asp	Gly	Pro	Ser	Ala	Arg	Val	Leu	Ala	Gln	Leu	Arg	Gly
		515					520					525			
Pro	Gln	Pro	Arg	Arg	Arg	Leu	Leu	Ser	Ser	Gly	Pro	Asp	Leu	Thr	Leu
	530					535					540				
Gln	Phe	Gln	Ala	Pro	Pro	Gly	Pro	Pro	Asn	Pro	Gly	Leu	Gly	Gln	Gly
545															

625		630		635		640									
Ile	Ala	Asn	Gly	His	Arg	Thr	Ala	Ser	Asp	Ala	Gly	Phe	Pro	Val	Gly
		645		650		655									
Ser	His	Val	Gln	Tyr	Arg	Cys	Leu	Pro	Gly	Tyr	Ser	Leu	Glu	Ala	
		660		665		670									
Ala	Met	Leu	Thr	Cys	Tyr	Ser	Arg	Asp	Thr	Gly	Thr	Pro	Lys	Trp	Ser
		675		680		685									
Asp	Arg	Val	Pro	Lys	Cys	Ala	Leu	Lys	Tyr	Glu	Pro	Cys	Leu	Asn	Pro
		690		695		700									
Gly	Val	Pro	Glu	Asn	Gly	Tyr	Gln	Thr	Leu	Tyr	Lys	His	His	Tyr	Gln
		705		710		715									
Ala	Gly	Glu	Ser	Leu	Arg	Phe	Phe	Cys	Tyr	Glu	Gly	Phe	Glu	Leu	Ile
		725		730		735									
Gly	Glu	Val	Thr	Ile	Thr	Cys	Val	Pro	Gly	His	Pro	Ser	Gln	Trp	Thr
		740		745		750									
Ser	Gln	Pro	Pro	Leu	Cys	Lys	Val	Ala	Tyr	Glu	Glu	Leu	Leu	Asp	Asn
		755		760		765									
Arg	Lys	Leu	Glu	Val	Thr	Gln	Thr	Thr	Asp	Pro	Ser	Arg	Gln	Leu	Glu
		770		775		780									
Gly	Gly	Asn	Leu	Ala	Leu	Ala	Ile	Leu	Leu	Pro	Leu	Gly	Leu	Val	Ile
		785		790		795									
Val	Leu	Gly	Ser	Gly	Val	Tyr	Ile	Tyr	Tyr	Thr	Lys	Leu	Gln	Gly	Lys
		805		810		815									
Ser	Leu	Phe	Gly	Phe	Ser	Gly	Ser	His	Ser	Tyr	Ser	Pro	Ile	Thr	Val
		820		825		830									
Glu	Ser	Asp	Phe	Ser	Asn	Pro	Leu	Tyr	Glu	Ala	Gly	Asp	Thr	Arg	Glu
		835		840		845									
Tyr	Glu	Val	Ser	Ile											
		850													

&lt;210&gt; 5267

&lt;211&gt; 885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5267

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120
attcccagtc ttcatttccc agccaccaa ggacatctca gcaacagagc cattatccga
180
gcccttctg ttagagaaat ttacatgaat gtacctgtag gggctgcggg agtgagagga
240
ctgggcggcc gtggctatctt ggcatacaca ggcctgggtc gaggatacca ggtcaaagga
300
gacaaaagag aagacaaact ctatgacatt ttacctggga tggagctcac cccaatgaat
360
cctgtcacat taaaaccca aggaattaaa ctgcgtcccc agatattaga agagatttgt
420
cagaaaaata actggggaca gccagtgtac cagctgcact ctgctattgg acaagaccaa
480
agacagctat tcttgtacaa aataactatt cctgctctag ccagccagaa tcctgcaatc
540

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caccctttca cacctccaaa gctgagtgcc tttgtggatg aagcaaagac gtatgcagcc  
 600  
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 660  
 gctgctgctg ctgctactgc tttcccagga tatgctgtcc ctaatgcaac tgcacccgtg  
 720  
 tctgcagccc agctcaagca agcggtaacc cttggacaag acttagcagc atatacaacc  
 780  
 tatgaggtct acccaacttt tgcagtgact gcccgagggg atggatatgg caccttctga  
 840  
 agatgctttt ttaaatttaa gaataagaca cacaaaactc tatta  
 885

<210> 5268

<211> 279

<212> PRT

<213> Homo sapiens

<400> 5268

Phe	Gly	Thr	Arg	Gly	Thr	Met	Leu	Gln	Gly	Glu	Tyr	Thr	Tyr	Ser	Leu
1				5					10					15	
Gly	Gln	Val	Tyr	Asp	Pro	Thr	Thr	Thr	Tyr	Leu	Gly	Ala	Pro	Val	Phe
		20						25					30		
Tyr	Ala	Pro	Gln	Thr	Tyr	Ala	Ala	Ile	Pro	Ser	Leu	His	Phe	Pro	Ala
		35					40					45			
Thr	Lys	Gly	His	Leu	Ser	Asn	Arg	Ala	Ile	Ile	Arg	Ala	Pro	Ser	Val
	50					55					60				
Arg	Glu	Ile	Tyr	Met	Asn	Val	Pro	Val	Gly	Ala	Ala	Gly	Val	Arg	Gly
65					70					75					80
Leu	Gly	Gly	Arg	Gly	Tyr	Leu	Ala	Tyr	Thr	Gly	Leu	Gly	Arg	Gly	Tyr
			85						90					95	
Gln	Val	Lys	Gly	Asp	Lys	Arg	Glu	Asp	Lys	Leu	Tyr	Asp	Ile	Leu	Pro
			100					105					110		
Gly	Met	Glu	Leu	Thr	Pro	Met	Asn	Pro	Val	Thr	Leu	Lys	Pro	Gln	Gly
		115					120					125			
Ile	Lys	Leu	Ala	Pro	Gln	Ile	Leu	Glu	Glu	Ile	Cys	Gln	Lys	Asn	Asn
	130					135					140				
Trp	Gly	Gln	Pro	Val	Tyr	Gln	Leu	His	Ser	Ala	Ile	Gly	Gln	Asp	Gln
145					150					155					160
Arg	Gln	Leu	Phe	Leu	Tyr	Lys	Ile	Thr	Ile	Pro	Ala	Leu	Ala	Ser	Gln
			165					170						175	
Asn	Pro	Ala	Ile	His	Pro	Phe	Thr	Pro	Pro	Lys	Leu	Ser	Ala	Phe	Val
			180					185					190		
Asp	Glu	Ala	Lys	Thr	Tyr	Ala	Ala	Glu	Tyr	Thr	Leu	Gln	Thr	Leu	Gly
		195					200					205			
Ile	Pro	Thr	Asp	Gly	Gly	Asp	Gly	Thr	Met	Ala	Thr	Ala	Ala	Ala	Ala
	210					215					220				
Ala	Thr	Ala	Phe	Pro	Gly	Tyr	Ala	Val	Pro	Asn	Ala	Thr	Ala	Pro	Val
225					230					235					240
Ser	Ala	Ala	Gln	Leu	Lys	Gln	Ala	Val	Thr	Leu	Gly	Gln	Asp	Leu	Ala
			245					250						255	
Ala	Tyr	Thr	Thr	Tyr	Glu	Val	Tyr	Pro	Thr	Phe	Ala	Val	Thr	Ala	Arg
			260					265						270	
Gly	Asp	Gly	Tyr	Gly	Thr	Phe									

275

&lt;210&gt; 5269

&lt;211&gt; 1177

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5269

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60  
tctactagct caagtagtca ggagaataat tctgccccaa gcagtctgct tccttccatg  
120  
aatgaacagt cacagaagac acaaaatata tccagctttg attctgagct gtttctagaa  
180  
gaactggatg aattgcctcc attgtctcca atgcagccaa tttcagagga agaggctatt  
240  
cagattattg cagaccctcc attgccacca gcttcattca cacttcgaga ctatgtggat  
300  
cattctgaga ctctgcagaa gttgggttctt ctaggcgtgg atttgtccaa gatagaaaaa  
360  
catccagaag cagcaaacct ccttctgaga ctggattttg aaaaagacat taagcaaattg  
420  
cttctgtttc ttaaagatgt gggatatagag gataaccaac tgggagcatt cctgacaaaa  
480  
aatcatgcaa ttttctctga agaccttgaa aatctgaaga ccagggtggc ttatctgcat  
540  
tcaaaaaatt tcagtaaagc agatgttgca cagatgggtca gaaaagcacc atttttgctg  
600  
aacttttcag tggaaagact ggataacaga ttgggatttt ttcagaaaga acttgaactt  
660  
agtgtgaaga agactagaga tctggtagtt cgtctcccaa ggctgctaac tggaagtctg  
720  
gaaccctgta aagaaaatat gaaggtttat cgtcttgaac ttggttttta acataacgaa  
780  
attcaacata tgatcaccag aatcccaaag atgttaactg caaataaaat gaaacttacc  
840  
gagacgtttg attttgtgca caatgtgatg agcattcccc accacatcat tgtcaagttc  
900  
ccacaggtat ttaatacaag gctgtttaag gtcaaagaaa gacacttggt tcttacctat  
960  
ttaggaagag cacagtatga tccagcaaaa cctaactaca tctctttgga caaactagta  
1020  
tctattcctg atgaaatatt ttgtgaagag attgccaaag catcagtaca ggactttgaa  
1080  
aaattcttaa aaacgcttta gatttttatg tatgttaaaa tgcagtattg taaagtgaat  
1140  
atatatatga ataaatgaat atatttttaa aaaaaaa  
1177

&lt;210&gt; 5270

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 5270

```

Met Asn Glu Gln Ser Gln Lys Thr Gln Asn Ile Ser Ser Phe Asp Ser
 1           5           10           15
Glu Leu Phe Leu Glu Glu Leu Asp Glu Leu Pro Pro Leu Ser Pro Met
          20           25           30
Gln Pro Ile Ser Glu Glu Glu Ala Ile Gln Ile Ile Ala Asp Pro Pro
          35           40           45
Leu Pro Pro Ala Ser Phe Thr Leu Arg Asp Tyr Val Asp His Ser Glu
          50           55           60
Thr Leu Gln Lys Leu Val Leu Leu Gly Val Asp Leu Ser Lys Ile Glu
          65           70           75           80
Lys His Pro Glu Ala Ala Asn Leu Leu Leu Arg Leu Asp Phe Glu Lys
          85           90           95
Asp Ile Lys Gln Met Leu Leu Phe Leu Lys Asp Val Gly Ile Glu Asp
          100          105          110
Asn Gln Leu Gly Ala Phe Leu Thr Lys Asn His Ala Ile Phe Ser Glu
          115          120          125
Asp Leu Glu Asn Leu Lys Thr Arg Val Ala Tyr Leu His Ser Lys Asn
          130          135          140
Phe Ser Lys Ala Asp Val Ala Gln Met Val Arg Lys Ala Pro Phe Leu
          145          150          155          160
Leu Asn Phe Ser Val Glu Arg Leu Asp Asn Arg Leu Gly Phe Phe Gln
          165          170          175
Lys Glu Leu Glu Leu Ser Val Lys Lys Thr Arg Asp Leu Val Val Arg
          180          185          190
Leu Pro Arg Leu Leu Thr Gly Ser Leu Glu Pro Val Lys Glu Asn Met
          195          200          205
Lys Val Tyr Arg Leu Glu Leu Gly Phe Lys His Asn Glu Ile Gln His
          210          215          220
Met Ile Thr Arg Ile Pro Lys Met Leu Thr Ala Asn Lys Met Lys Leu
          225          230          235          240
Thr Glu Thr Phe Asp Phe Val His Asn Val Met Ser Ile Pro His His
          245          250          255
Ile Ile Val Lys Phe Pro Gln Val Phe Asn Thr Arg Leu Phe Lys Val
          260          265          270
Lys Glu Arg His Leu Phe Leu Thr Tyr Leu Gly Arg Ala Gln Tyr Asp
          275          280          285
Pro Ala Lys Pro Asn Tyr Ile Ser Leu Asp Lys Leu Val Ser Ile Pro
          290          295          300
Asp Glu Ile Phe Cys Glu Glu Ile Ala Lys Ala Ser Val Gln Asp Phe
          305          310          315          320
Glu Lys Phe Leu Lys Thr Leu
          325

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&lt;210&gt; 5271

&lt;211&gt; 1185

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5271

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nagatctgcg gtctggggtc tgggtgaaag atggcggccc tcaactaccct gtttaagtac
60
atagatgaaa atcaggatcg ctacattaag cctgttcaac tgcagcagcc acagaggggtg
120

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agcctggaat gtggcaacgt tacgggagcc tcttctccct caaggacacc ttttcagaat  
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 240  
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 360  
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 480  
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 540  
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 600  
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 660  
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 tgcatttctg acaattactg gctgggaaag aagaagccct gcatcaccta cggcctcagg  
 780  
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 840  
 tacgggggct cgggtgcatga ggccatgact gatctcattt tgctgatggg ctctttgggtg  
 900  
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 960  
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 1020  
 ggggcgcaga tcctcctgca cagccacaag aaagacatcc tcatgcaccg atggcggtac  
 1080  
 ccgtctctgt cctccatgg catcgaaggc gccttctctg ggtctggggc caagaccgtg  
 1140  
 attcccaaaa aggtgggttg caagttctcc atcaggctcg tgccg  
 1185

&lt;210&gt; 5272

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5272

Met	Ala	Ala	Leu	Thr	Leu	Phe	Lys	Tyr	Ile	Asp	Glu	Asn	Gln	Asp
1			5				10						15	
Arg	Tyr	Ile	Lys	Pro	Val	Gln	Leu	Gln	Gln	Pro	Gln	Arg	Val	Ser
			20				25					30		Leu
Glu	Cys	Gly	Asn	Val	Thr	Gly	Ala	Ser	Ser	Pro	Ser	Arg	Thr	Pro
		35				40						45		Phe
Gln	Asn	Pro	Ser	Leu	Leu	Leu	Val	His	Lys	Gln	Lys	Leu	Ala	Lys
		50				55				60				Trp
Val	Ala	Ile	Gln	Ser	Val	Ser	Ala	Trp	Pro	Glu	Lys	Arg	Gly	Glu
65					70				75					80
Arg	Arg	Met	Met	Glu	Val	Ala	Ala	Ala	Asp	Val	Lys	Gln	Leu	Gly

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      85              90              95
Ser Val Glu Leu Val Asp Ile Gly Lys Gln Lys Leu Pro Asp Gly Ser
      100              105              110
Glu Ile Pro Leu Pro Pro Ile Leu Leu Gly Arg Leu Gly Ser Asp Pro
      115              120              125
Gln Lys Lys Thr Val Cys Ile Tyr Gly His Leu Asp Val Gln Pro Ala
      130              135              140
Ala Leu Glu Asp Gly Trp Asp Ser Glu Pro Phe Thr Leu Val Glu Arg
      145              150              155              160
Asp Gly Lys Leu Tyr Gly Arg Gly Ser Thr Asp Asp Lys Gly Pro Val
      165              170              175
Ala Gly Trp Ile Asn Ala Leu Glu Ala Tyr Gln Lys Thr Gly Gln Glu
      180              185              190
Ile Pro Val Asn Val Arg Phe Cys Leu Glu Gly Met Glu Glu Ser Gly
      195              200              205
Ser Glu Gly Leu Asp Glu Leu Ile Phe Ala Arg Lys Asp Thr Phe Phe
      210              215              220
Lys Asp Val Asp Tyr Val Cys Ile Ser Asp Asn Tyr Trp Leu Gly Lys
      225              230              235              240
Lys Lys Pro Cys Ile Thr Tyr Gly Leu Arg Gly Ile Cys Tyr Phe Phe
      245              250              255
Ile Glu Val Glu Cys Ser Asn Lys Asp Leu His Ser Gly Val Tyr Gly
      260              265              270
Gly Ser Val His Glu Ala Met Thr Asp Leu Ile Leu Leu Met Gly Ser
      275              280              285
Leu Val Asp Lys Arg Gly Asn Ile Leu Ile Pro Gly Ile Asn Glu Ala
      290              295              300
Val Ala Ala Val Thr Glu Glu Glu His Lys Leu Tyr Asp Asp Ile Asp
      305              310              315              320
Phe Asp Ile Glu Glu Phe Ala Lys Asp Val Gly Ala Gln Ile Leu Leu
      325              330              335
His Ser His Lys Lys Asp Ile Leu Met His Arg Trp Arg Tyr Pro Ser
      340              345              350
Leu Ser Leu His Gly Ile Glu Gly Ala Phe Ser Gly Ser Gly Ala Lys
      355              360              365
Thr Val Ile Pro Lys Lys Val Val Gly Lys Phe Ser Ile Arg Leu Val
      370              375              380
Pro
385

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&lt;210&gt; 5273

&lt;211&gt; 4580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5273

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120
tcgcttgaac ccgggaggtg gaggttgagg tgagccaaga tcgcgccatt gctcttcagc
180
ctgggcaaca agagtgaaac tccatctttc ttttgagcca aagcctgggc aatgaagtcg
240

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&lt;210&gt; 5274

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5274

Met	Ser	Gly	Ser	Phe	Glu	Leu	Ser	Val	Gln	Asp	Leu	Asn	Asp	Leu	Leu
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Ser	Asp	Gly	Ser	Gly	Cys	Tyr	Ser	Leu	Pro	Ser	Gln	Pro	Cys	Asn	Glu
			20					25					30		
Val	Thr	Pro	Arg	Ile	Tyr	Val	Gly	Asn	Ala	Ser	Val	Ala	Gln	Asp	Ile
			35				40						45		
Pro	Lys	Leu	Gln	Lys	Leu	Gly	Ile	Thr	His	Val	Leu	Asn	Ala	Ala	Glu
			50				55					60			
Gly	Arg	Ser	Phe	Met	His	Val	Asn	Thr	Asn	Ala	Asn	Phe	Tyr	Lys	Asp

65					70					75					80
Ser	Gly	Ile	Thr	Tyr	Leu	Gly	Ile	Lys	Ala	Asn	Asp	Thr	Gln	Glu	Phe
				85					90					95	
Asn	Leu	Ser	Ala	Tyr	Phe	Glu	Arg	Ala	Ala	Asp	Phe	Ile	Asp	Gln	Ala
			100					105					110		
Leu	Ala	Gln	Lys	Asn	Gly	Arg	Val	Leu	Val	His	Cys	Arg	Glu	Gly	Tyr
		115				120					125				
Ser	Arg	Ser	Pro	Thr	Leu	Val	Ile	Ala	Tyr	Leu	Met	Met	Arg	Gln	Lys
	130					135					140				
Met	Asp	Val	Lys	Ser	Ala	Leu	Ser	Ile	Val	Arg	Gln	Asn	Arg	Glu	Ile
145					150					155					160
Gly	Pro	Asn	Asp	Gly	Phe	Leu	Ala	Gln	Leu	Cys	Gln	Leu	Asn	Asp	Arg
			165					170						175	
Leu	Ala	Lys	Glu	Gly	Lys	Leu	Lys	Pro							
			180					185							

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 <211> 810  
 <212> DNA  
 <213> Homo sapiens

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 720  
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 810

<210> 5276  
 <211> 125  
 <212> PRT

<213> Homo sapiens

<400> 5276

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 20           25           30
Glu Glu Met Tyr Asp Ile Phe Gly Lys Tyr Gly Pro Ile Arg Gln Ile
 35           40           45
Arg Val Gly Asn Thr Pro Glu Thr Arg Gly Thr Ala Tyr Val Val Tyr
 50           55           60
Glu Asp Ile Phe Asp Ala Lys Asn Ala Cys Asp His Leu Ser Gly Phe
 65           70           75           80
Asn Val Cys Asn Arg Tyr Leu Val Val Leu Tyr Tyr Asn Ala Asn Arg
 85           90           95
Ala Phe Gln Lys Met Asp Thr Lys Lys Lys Glu Glu Gln Leu Lys Leu
100           105           110
Leu Lys Glu Lys Tyr Gly Ile Asn Thr Asp Pro Pro Lys
115           120           125

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<210> 5277

<211> 612

<212> DNA

<213> Homo sapiens

<400> 5277

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120
accctgtccc tgcccttcta catctcccag tgctggaccc tcggctccgt cctggcgctc
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240
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420
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480
tgcttttctc ctgtgcacct ggcgaggctg aaggcgaggg gtggaggagg cccagcaca
540
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tgtgtgtacg tg
612

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<210> 5278

<211> 123

<212> PRT

<213> Homo sapiens



&lt;400&gt; 5278

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Ile Tyr Asp Phe Met Asp Asp Pro Lys Pro His Lys Lys Leu Gly Pro
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Gln Ala Trp Leu Val Ala Ala Ile Thr Ala Thr Glu Leu Leu Ile Val
20           25           30
Val Lys Tyr Asp Pro His Thr Leu Thr Leu Ser Leu Pro Phe Tyr Ile
35           40           45
Ser Gln Cys Trp Thr Leu Gly Ser Val Leu Ala Leu Thr Trp Thr Val
50           55           60
Trp Arg Phe Phe Leu Arg Asp Ile Thr Leu Arg Tyr Lys Glu Thr Arg
65           70           75           80
Trp Gln Lys Trp Gln Asn Lys Asp Asp Gln Gly Ser Thr Val Gly Asn
85           90           95
Gly Asp Gln His Pro Leu Gly Leu Asp Glu Asp Leu Leu Gly Pro Gly
100          105          110
Val Ala Glu Gly Glu Gly Ala Pro Thr Pro Asn
115          120

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&lt;210&gt; 5279

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5279

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900

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1225

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<212> PRT  
<213> Homo sapiens

<400> 5280  
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Gly Lys Leu Val Leu Ile Asp Lys Leu Leu Pro Lys Leu Ile Ala Gly  
35 40 45  
Gly His Lys Val Leu Ile Phe Ser Gln Met Val Arg Cys Leu Asp Ile  
50 55 60  
Leu Glu Asp Tyr Leu Ile Gln Arg Arg Tyr Thr Tyr Glu Arg Ile Asp  
65 70 75 80  
Gly Arg Val Arg Gly Asn Leu Arg Gln Ala Ala Ile Asp Arg Phe Ser  
85 90 95  
Lys Pro Asp Ser Asp Arg Phe Val Phe Leu Leu Cys Thr Arg Ala Gly  
100 105 110  
Gly Leu Gly Ile Asn Leu Thr Ala Ala Asp Thr Cys Ile Ile Phe Asp  
115 120 125  
Ser Asp Trp Asn Pro Gln Asn Asp Leu Gln Ala Gln Ala Arg Cys His  
130 135 140  
Arg Ile Gly Gln Ser Lys Ala Val Lys Val Tyr Arg Leu Ile Thr Arg  
145 150 155 160  
Asn Ser Tyr Glu Arg Glu Met Phe Asp Lys Ala Ser Leu Lys Leu Gly  
165 170 175  
Leu Asp Lys Ala Val Leu Gln Thr Ser Thr Glu Arg Ala Ala Pro Met  
180 185 190  
Gly Thr Ala Leu Ser Lys Met Glu Val Glu Asp Leu Leu Arg Lys Gly  
195 200 205  
Ala Tyr Gly Ala Leu Met Asp Glu Glu Asp Glu Gly Ser Lys Phe Cys  
210 215 220  
Glu Glu Asp Ile Asp Gln Ile Leu Gln Arg Arg Thr His Thr Ile Thr  
225 230 235 240  
Ile Gln Ser Glu Gly Lys Gly Ser Thr Phe Ala Lys Ala Ser Phe Val  
245 250 255  
Ala Ser Gly Asn Arg Thr Asp Ile Ser Leu Asp Asp Pro Asn Phe Trp  
260 265 270  
Gln Lys Trp Ala Lys Ile Ala Glu Leu Asp Thr Glu Ala Lys Asn Glu

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Lys Glu Ser Leu Val Ile Asp Arg Pro Arg Val Arg Lys Gln Thr Lys
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His Tyr Asn Ser Phe Glu Glu Asp Glu Leu Met Glu Phe Ser Glu Leu
  305              310              315              320
Asp Ser Asp Ser Asp Glu Arg Pro Thr Arg Ser Arg Arg Leu Asn Asp
      325              330              335
Lys Ala Arg Arg Tyr Leu Arg Ala Glu Cys Phe Arg Val Glu Lys Asn
      340              345              350
Leu Leu Ile Phe Gly Trp Gly Arg Trp Lys Asp Ile Leu Thr His Gly
      355              360              365
Arg Phe Lys Trp His Leu Asn Glu Lys Asp Met Glu Met Ile Cys Arg
      370              375              380
Ala Leu Leu Val Tyr Cys Val Lys His Tyr Lys Gly Asp Glu Lys Ile
  385              390              395              400
Lys Ser Phe Ile Trp Glu Leu Ile
      405

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&lt;210&gt; 5281

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5281

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120
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240
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300
acttgagatt gctcattaat ggggattatg aagaag
336

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&lt;210&gt; 5282

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5282

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Met Gln Thr Ala Gln Asn Lys Tyr Gln Glu Leu Lys Asn Ile Cys Ser
  1              5              10              15
Tyr Arg Ala Gln Ala Phe Leu Val Leu Thr Gly Leu Thr Ala Thr Val
      20              25              30
Gly Asp Thr Ala Ile Ser Ser Glu Lys Thr Gln Arg Met Ser Leu
      35              40              45
Met Arg His His Met Gly Gln Ser Leu Ser Lys Glu Val Ala His Val
      50              55              60
Leu Thr Lys Pro Gly Ala Asp His Asp Trp Glu Asn Leu Glu Lys Asp
      65              70              75              80
Leu Arg Leu Leu Ile Asn Gly Asp Tyr Glu Glu

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85

90

&lt;210&gt; 5283

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5283

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120  
atggatggca tcattgaaca gaagagcatg ctgggtgcaca gtaaaatcag tgatgctggc  
180  
aagaggaatg gtttaattaa caccagaaac ttgatggccg agagcagaga tggctctggtg  
240  
tctgtttacc cagcgcccca gtaccagagc caccgggtgg gggccagcac agtgccggcc  
300  
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360  
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420  
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1320  
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1380

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 1740  
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 1800  
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 1860  
 cttcatgctg cttaagttac cagatgaatg ctgagaaata agtaatcaca gacattttaa  
 1920  
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 1980  
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 1989

&lt;210&gt; 5284

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5284

Met	Asp	Gly	Ile	Ile	Glu	Gln	Lys	Ser	Met	Leu	Val	His	Ser	Lys	Ile
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Ser	Asp	Ala	Gly	Lys	Arg	Asn	Gly	Leu	Ile	Asn	Thr	Arg	Asn	Leu	Met
			20					25					30		
Ala	Glu	Ser	Arg	Asp	Gly	Leu	Val	Ser	Val	Tyr	Pro	Ala	Pro	Gln	Tyr
		35					40					45			
Gln	Ser	His	Arg	Val	Gly	Ala	Ser	Thr	Val	Pro	Ala	Ser	Leu	Asp	Ser
	50					55				60					
Ser	Arg	Ser	Glu	Pro	Met	Gln	Gln	Leu	Leu	Asp	Pro	Asn	Thr	Leu	Gln
65					70					75				80	
Gln	Ser	Val	Glu	Ser	Arg	Tyr	Arg	Pro	Asn	Ile	Ile	Leu	Tyr	Ser	Glu
			85						90					95	
Gly	Val	Leu	Arg	Ser	Trp	Gly	Asp	Gly	Val	Ala	Ala	Asp	Cys	Cys	Glu
			100					105					110		
Thr	Thr	Phe	Ile	Glu	Asp	Arg	Ser	Pro	Thr	Lys	Asp	Ser	Leu	Glu	Tyr
		115					120					125			
Pro	Asp	Gly	Lys	Phe	Ile	Asp	Leu	Ser	Ala	Asp	Asp	Ile	Lys	Ile	His
	130					135					140				
Thr	Leu	Ser	Tyr	Asp	Val	Glu	Glu	Glu	Glu	Glu	Phe	Gln	Glu	Leu	Glu
145					150					155				160	
Ser	Asp	Tyr	Ser	Ser	Asp	Thr	Glu	Ser	Glu	Asp	Asn	Phe	Leu	Met	Met
			165						170					175	
Pro	Pro	Arg	Asp	His	Leu	Gly	Leu	Ser	Val	Phe	Ser	Met	Leu	Cys	Cys
			180					185					190		
Phe	Trp	Pro	Leu	Gly	Ile	Ala	Ala	Phe	Tyr	Leu	Ser	His	Glu	Thr	Asn

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<210> 5285
<211> 2155
<212> DNA
<213> Homo sapiens
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4454

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 1260  
 gtgaaggagg aggccaagat ggtgtacctg ctcgagtgcc tgcagaagac acccccgcct  
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 1380  
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 1440  
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 1500  
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 1560  
 aactatgtac accggattgg ccgcaccggg cgctcgggaa acacaggcat cgccactacc  
 1620  
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 1680  
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 1800  
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 1860  
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 1920  
 agtccccaag actgccacca gtctacacat acagcagccc cctggacaga atcagcattt  
 1980  
 cagctcagct ggccctggaat gggccaggct ggtcctggct gcctgttccc tgtgctcttc  
 2040  
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 2155

&lt;210&gt; 5286

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5286

Xaa	Arg	Val	Gln	Gln	Arg	Met	Glu	Glu	Ser	Glu	Pro	Glu	Arg	Lys	Arg
1				5					10					15	
Ala	Arg	Thr	Asp	Glu	Val	Pro	Ala	Gly	Gly	Ser	Arg	Ser	Glu	Ala	Glu
			20					25					30		
Asp	Glu	Asp	Asp	Glu	Asp	Tyr	Val	Pro	Tyr	Val	Pro	Leu	Arg	Gln	Arg
		35				40						45			
Arg	Gln	Leu	Leu	Leu	Gln	Lys	Leu	Leu	Gln	Arg	Arg	Arg	Lys	Gly	Ala
	50				55					60					
Ala	Glu	Glu	Glu	Gln	Gln	Asp	Ser	Gly	Ser	Glu	Pro	Arg	Gly	Asp	Glu
65					70				75					80	
Asp	Asp	Ile	Pro	Leu	Gly	Pro	Gln	Ser	Asn	Val	Ser	Leu	Leu	Asp	Gln
			85					90					95		
His	Gln	His	Leu	Lys	Glu	Lys	Ala	Glu	Ala	Arg	Lys	Glu	Ser	Ala	Lys

4456



530                      535                      540  
 Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Leu Glu  
 545                      550                      555  
 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp  
                     565                      570                      575  
 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly  
                     580                      585                      590  
 Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln  
                     595                      600                      605  
 Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser  
                     610                      615                      620  
 Ser Met Asp Phe  
 625

<210> 5287  
 <211> 581  
 <212> DNA  
 <213> Homo sapiens

<400> 5287  
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 120  
 tcgggagcgg agttgcagaa tccaaggacc cattttgttc tttctccgca ctgctttatg  
 180  
 ggaggcatta tggcccccaa agacataatg acaaatactc atgctaaatc catcctcaat  
 240  
 tcaatgaact ccctcaggaa gagcaatacc ctctgtgatg tgacattgag agtagagcag  
 300  
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 360  
 ttcactagtg agctctcaga gaaggggaaa ctttatgttg acatccaagg tttgactgcc  
 420  
 tctaccatgg aaattttatt ggactttgtg tacacagaaa cggtagatgt gacagtggag  
 480  
 aatgtacaag aactgcttcc tgcagcctgt ctgcttcagt tgaaagggtg gaaacaagcc  
 540  
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 581

<210> 5288  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<400> 5288  
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 Glu Pro Pro Ala Ser Pro Ala Pro His Ser Ile Pro Thr Gly Trp Gly  
                     20                      25                      30  
 Arg Ala Arg Cys Gly Cys Val Gly Ser Gly Ala Glu Leu Gln Asn Pro  
                     35                      40                      45  
 Arg Thr His Phe Val Leu Ser Pro His Cys Phe Met Gly Gly Ile Met

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      50              55              60
Ala Pro Lys Asp Ile Met Thr Asn Thr His Ala Lys Ser Ile Leu Asn
65              70              75              80
Ser Met Asn Ser Leu Arg Lys Ser Asn Thr Leu Cys Asp Val Thr Leu
      85              90              95
Arg Val Glu Gln Lys Asp Phe Pro Ala His Arg Ile Val Leu Ala Ala
      100              105              110
Cys Ser Asp Tyr Phe Cys Ala Met Phe Thr Ser Glu Leu Ser Glu Lys
      115              120              125
Gly Lys Pro Tyr Val Asp Ile Gln Gly Leu Thr Ala Ser Thr Met Glu
      130              135              140
Ile Leu Leu Asp Phe Val Tyr Thr Glu Thr Val His Val Thr Val Glu
145              150              155              160
Asn Val Gln Glu Leu Leu Pro Ala Ala Cys Leu Leu Gln Leu Lys Gly
      165              170              175
Val Lys Gln Ala Cys Cys Glu Phe Leu Glu Ser Gln Leu Asp Pro Ser
      180              185              190
Arg

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&lt;210&gt; 5289

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5289

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agatctctgt acacatgtta caccagacag ctatattcca tgccttgcag acctgtgcaa
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120
caatgaggat actgcttcag cttctgaagg ggaagtatat gatagggtcc tgaagaaact
180
tattttgatc ggggctacat taaaaaagaa attagaacat ggacttacac gaatatggca
240
ggatgttcag ctaaaagtaa aaacctactt gcttggaact gatttgtcta tattcaaata
300
tgatgatttc atctttgttt tggatataat cagcaggttg atgcaagttg gagaagaatt
360
c
361

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&lt;210&gt; 5290

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5290

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Met Leu Ser Tyr Tyr Arg Thr Met Glu Trp His Glu Lys His Asp Asn
1              5              10              15
Glu Asp Thr Ala Ser Ala Ser Glu Gly Glu Val Tyr Asp Arg Val Leu
      20              25              30
Lys Lys Leu Ile Leu Ile Gly Ala Thr Leu Lys Lys Lys Leu Glu His
      35              40              45
Gly Leu Thr Arg Ile Trp Gln Asp Val Gln Leu Lys Val Lys Thr Tyr

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50	55	60
Leu Leu Gly Thr Asp	Leu Ser Ile Phe Lys Tyr Asp Asp Phe Ile Phe	
65	70	75
Val Leu Asp Ile Ile	Ser Arg Leu Met Gln Val Gly Glu Glu Phe	80
	85	90
		95

<210> 5291  
 <211> 767  
 <212> DNA  
 <213> Homo sapiens

<400> 5291  
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 aagatggcca cgcagaagac tcccagcagg gcgtacatgc ccagctctag ctcagtgaca  
 120  
 tgctgagggg cagggaccat ctctctctcc tcttctctct cctccctggc ttggtctcc  
 180  
 tccttctctg cctctctctc tgcccgetca aacttgcccc tcacacctgt gttgcccccg  
 240  
 acactgcctg ccacctgccg tttaccaccc atggtggctt ctgtggctgg tgggctccaa  
 300  
 gcagggctgg atggggagag caggggctgg agtggaggca gggggcagcc ccaccaggc  
 360  
 ggtgccagag gccaaaggca cacggtggcg gccccggcgn gcagggctcg ggcgggtgca  
 420  
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 480  
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 600  
 agagggccac ctctgtggg gcacacagac acaggcagag acatgagagg gcacgcacgc  
 660  
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 720  
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 767

<210> 5292  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 5292  
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 Val Ser Ser Phe Leu Ala Ser Ser Ser Ala Arg Ser Asn Leu Pro Leu  
 20 25 30  
 Thr Pro Val Leu Pro Pro Thr Leu Pro Ala Thr Cys Arg Leu Pro Pro  
 35 40 45  
 Met Val Ala Ser Val Ala Gly Gly Leu Gln Ala Gly Leu Asp Gly Glu  
 50 55 60  
 Ser Arg Gly Trp Ser Gly Gly Arg Gly Gln Pro His Pro Gly Gly Ala

65					70					75				80
Arg	Gly	Gln	Arg	His	Thr	Val	Ala	Ala	Pro	Ala	Xaa	Arg	Ala	Arg
				85					90					95
Gly	Ala	Glu	Pro	His	Ala	Ala	Ala	Ala	Pro	Arg	Arg	Leu	Pro	His
			100					105				110		
Pro	Pro	Pro	Arg	Ala	Gly	His	Pro	Ala	Pro	Gln	Leu	Ala	Gly	Trp
		115				120				125				
Gln	Ala	Pro	Arg	Leu	Lys	Arg	Thr	Val	Pro	Val	Arg	Arg	Ser	
	130					135				140				

&lt;210&gt; 5293

&lt;211&gt; 1428

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5293

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cggtgcaccc cagcctcccc cactcgggtt ctgagcttga gctggcggct ctttaactct
120
gcttcactgt tgctcttggc aacatccact tccgggagcg agtgccgttt ccccgctca
180
ccgcggggcta gggagcgtgg gattccggac tgtgagcggc tgtagtgcg tcgcagctgc
240
tggcgatccg gcgacctcg gccggcagga cccgcgggcc acgcagccgg ggccttctca
300
acgcctcagt acctcggcgg gaccgccatg gttctgctgc acgtgaagcg gggcgacgag
360
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540
gaattgaaat tgaaggatga atgggggtgaa aaatgcgtac ccagcggagg tgcaagtgtt
600
aaaaaggatg atattggacg aaggaatggg caagctccaa atgagaagat gaagcaagtg
660
ttaaagaaga ctatagaaga agccaaggca ataatatcta agaaacaagt ggaagccggt
720
gtctgtgtta ccatggagat ggtgaaagat gccttgacc agcttcgagg cgcggtgatg
780
attgtttacc ccatgggggt gccaccgtat gatcccatcc gcatggagtt tgaaaataag
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900
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960
gaaaaaacca aaattatcgc caagattcag caaaggggac agggagctcc agcccagag
1020
cctattatta gcagtgagga gcagaagcag ctgatgctgt actatcacag aagacaagag
1080
gagctcaaga gattggaaga aaatgatgat gatgcctatt taaactcacc atgggcggat
1140

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aacactgctt tgaaaagaca ttttcatgga gtgaaagaca taaagtggag accaagatga  
 1200  
 agttcaccag ctgatgacac ttccaaagag attagctcac ctttctccta ggcaattata  
 1260  
 atttaaaaaa aaaaaaaagg ccacttactg ccctctgtaa aagatgttaa catttctagt  
 1320  
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 1380  
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 1428

<210> 5294  
 <211> 290  
 <212> PRT  
 <213> Homo sapiens

<400> 5294  
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 20 25 30  
 Arg Val Tyr Asn Gly Arg Leu Lys Val Gln Arg Leu Cys Ser Glu Met  
 35 40 45  
 Glu Glu Leu Ala Glu His Gly Ile Phe Leu Pro Pro Asn Met Gln Gly  
 50 55 60  
 Leu Thr Asp Asp Gln Ile Glu Glu Leu Lys Leu Lys Asp Glu Trp Gly  
 65 70 75 80  
 Glu Lys Cys Val Pro Ser Gly Gly Ala Val Phe Lys Lys Asp Asp Ile  
 85 90 95  
 Gly Arg Arg Asn Gly Gln Ala Pro Asn Glu Lys Met Lys Gln Val Leu  
 100 105 110  
 Lys Lys Thr Ile Glu Glu Ala Lys Ala Ile Ile Ser Lys Lys Gln Val  
 115 120 125  
 Glu Ala Gly Val Cys Val Thr Met Glu Met Val Lys Asp Ala Leu Asp  
 130 135 140  
 Gln Leu Arg Gly Ala Val Met Ile Val Tyr Pro Met Gly Leu Pro Pro  
 145 150 155 160  
 Tyr Asp Pro Ile Arg Met Glu Phe Glu Asn Lys Glu Asp Leu Ser Gly  
 165 170 175  
 Thr Gln Ala Gly Leu Asn Val Ile Lys Glu Ala Glu Ala Gln Leu Trp  
 180 185 190  
 Trp Ala Ala Lys Glu Leu Arg Arg Thr Lys Lys Leu Ser Asp Tyr Val  
 195 200 205  
 Gly Lys Asn Glu Lys Thr Lys Ile Ile Ala Lys Ile Gln Gln Arg Gly  
 210 215 220  
 Gln Gly Ala Pro Ala Arg Glu Pro Ile Ile Ser Ser Glu Glu Gln Lys  
 225 230 235 240  
 Gln Leu Met Leu Tyr Tyr His Arg Arg Gln Glu Glu Leu Lys Arg Leu  
 245 250 255  
 Glu Glu Asn Asp Asp Ala Tyr Leu Asn Ser Pro Trp Ala Asp Asn  
 260 265 270  
 Thr Ala Leu Lys Arg His Phe His Gly Val Lys Asp Ile Lys Trp Arg  
 275 280 285  
 Pro Arg

290

&lt;210&gt; 5295

&lt;211&gt; 1451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5295

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120  
gacagtaacg agcagtgtctg gccgggcccc actttcagag ggggcggaag ggcattctga  
180  
cacgtgtcat atggtaagag gcgcattccac tcaccagggc ctggtgcagg actctgcaag  
240  
gccctcctga gtaaagagtg gccacgaagg gctgctaggc agcacctact cttggaatca  
300  
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360  
gctgtggtga gccacaaagc accaagattc tgttcttcat tcagcaacca cccatgagcc  
420  
tctgtcttta ttccaatcgc atggcaccag cctgaaaacc tctctccctt ctgagaggaa  
480  
tgctggaatg acactccact ctgcccctcc ctccctcctt ccttgctcag ggtccatgtg  
540  
aacagcaggc cattgttggg aagtgcctgt tgcagtcatt cttacacccc cacagccact  
600  
gccccacaca cccactgggtg gctaccaagg cccgtcaata gatcttgtgt ccaccgagcc  
660  
ctggtgtcca ggtccagcag ccagacaggc tgaagggtcc ctccctgcat cacagagtag  
720  
ccaagcacta caaagagggt ttcatggcca gattcctgac ggctggcccc ttacagggca  
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840  
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900  
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960  
ctcaaaaagg cgggtgacct tcaactttaag ttgcttcgc agtttttcta tttctttatc  
1020  
cagatgatct tgatcttttt caatcatttc ctttgtctca gggtgaggca tcttgataaa  
1080  
catgttcccc aagcaaacca tcacatcttc agagaggctg agatccttct gcagggccct  
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1200  
cagcacctcc tggcgagct cctccacttc tacaaggtag cgcagcactc gctctgcctc  
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1320  
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 1440  
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 1451

<210> 5296  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 5296  
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 Leu Asp Thr Lys Arg Asn Gln Asn Arg Glu Gly Leu Arg Ala Leu Gln  
 35 40 45  
 Lys Asp Leu Ser Leu Ser Glu Asp Val Met Val Cys Phe Gly Asn Met  
 50 55 60  
 Phe Ile Lys Met Pro His Pro Glu Thr Lys Glu Met Ile Glu Lys Asp  
 65 70 75 80  
 Gln Asp His Leu Asp Lys Glu Ile Glu Lys Leu Arg Lys Gln Leu Lys  
 85 90 95  
 Val Lys Val Asn Arg Leu Phe Glu Ala Gln Gly Lys Pro Glu Leu Lys  
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 Gly Phe Asn Leu Asn Pro Leu Asn Gln Asp Glu Leu Lys Ala Leu Lys  
 115 120 125  
 Val Ile Leu Lys Gly  
 130

<210> 5297  
 <211> 5318  
 <212> DNA  
 <213> Homo sapiens

<400> 5297  
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 120  
 gagtgccttg gtgaagcaca tgagccttgt gactgccaaa catggaagaa ttggctgcaa  
 180  
 aaaataaccg aatgaaacc agaagaactt gtgggagtta gtgaagccta cgaggatgcc  
 240  
 gccaatgtgc tctggttatt aactaactcc aagccttgtg ccaactgtaa gtctccaata  
 300  
 cagaagaatg aaggctgcaa tcacatgcag tgtgctaagt gcaagtatga cttttgctgg  
 360  
 atttgccttg aagagtggaa aaaacatagt tcgtccactg gaggttatta cggatgtact  
 420  
 cgctatgaag tcattcaaca cgtggaggag caatccaagg aatgactgt ggaggctgag  
 480  
 aaaaaacaca aacgatttca ggaacttgac agatttatgc actattatac aagatttaaa  
 540

aaccatgagc atagttatca gctagaacaa cgcctttctta aaacagccaa agaaaagatg  
600  
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&lt;213&gt; Homo sapiens

&lt;400&gt; 5298

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&lt;210&gt; 5302

&lt;211&gt; 1339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5302

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			20					25				30			
Ala	Trp	Thr	Ala	Pro	Ser	Thr	Ser	Gln	Lys	Cys	Asp	Glu	Pro	Leu	Val
		35					40				45				
Ser	Gly	Leu	Pro	His	Val	Ala	Phe	Ser	Ser	Ser	Ser	Ser	Ile	Ser	Gly

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Ser Tyr Ser Pro Gly	Tyr Ala Lys Ile Asn	Lys Arg Gly Gly Ala Gly
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Gly Trp Ser Pro Ser	Asp Ser Asp His Tyr	Gln Trp Leu Gln Val Asp
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Phe Gly Asn Arg Lys	Gln Ile Ser Ala Ile	Ala Thr Gln Gly Arg Tyr
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Ser Ser Ser Asp Trp	Val Thr Gln Tyr Arg	Met Leu Tyr Ser Asp Thr
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Gly Arg Asn Trp Lys	Pro Tyr His Gln Asp	Gly Asn Ile Trp Ala Phe
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Pro Gly Asn Ile Asn	Ser Asp Gly Val Val	Arg His Glu Leu Gln His
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Pro Ile Ile Ala Arg	Tyr Val Arg Ile Val	Pro Leu Asp Trp Asn Gly
165	170	175
Glu Gly Arg Ile Gly	Leu Arg Ile Glu Val	Tyr Gly Cys Ser Tyr Trp
180	185	190
Ala Asp Val Ile Asn	Phe Asp Gly His Val	Val Leu Pro Tyr Arg Phe
195	200	205
Arg Asn Lys Lys Met	Lys Thr Leu Lys Asp	Val Ile Ala Leu Asn Phe
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Lys Thr Ser Glu Ser	Glu Gly Val Ile Leu	His Gly Glu Gly Gln Gln
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Gly Asp Tyr Ile Thr	Leu Glu Leu Lys Lys	Ala Lys Leu Val Leu Ser
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Val Met Thr Gly Ser	Leu Leu Asp Asp His	His Trp His Ser Val Val
275	280	285
Ile Glu Arg Gln Gly	Arg Ser Ile Asn Leu	Thr Leu Asp Arg Ser Met
290	295	300
Gln His Phe Arg Thr	Asn Gly Glu Phe Asp	Tyr Leu Asp Leu Asp Tyr
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Glu Ile Thr Phe Gly	Gly Ile Pro Phe Ser	Gly Lys Pro Ser Ser Ser
325	330	335
Ser Arg Lys Asn Phe	Lys Gly Cys Met Glu	Ser Ile Asn Tyr Asn Gly
340	345	350
Val Asn Ile Thr Asp	Leu Ala Arg Arg Lys	Lys Leu Glu Pro Ser Asn
355	360	365
Val Gly Asn Leu Ser	Phe Ser Cys Val Glu	Pro Tyr Thr Val Pro Val
370	375	380
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385	390	395
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405	410	415
Leu Leu Val Phe Ser	His Phe Ala Asp Asn	Leu Gly Asn Val Glu Ile
420	425	430
Asp Leu Thr Glu Ser	Lys Val Gly Val His	Ile Asn Ile Thr Gln Thr
435	440	445
Lys Met Ser Gln Ile	Asp Ile Ser Ser Gly	Ser Gly Leu Asn Asp Gly
450	455	460
Gln Trp His Glu Val	Arg Phe Leu Ala Lys	Glu Asn Phe Ala Ile Leu
465	470	475
Thr Ile Asp Gly Asp	Glu Ala Ser Ala Val	Arg Thr Asn Ser Pro Leu

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 Gln Val Lys Thr Gly Glu Lys Tyr Phe Phe Gly Gly Phe Leu Asn Gln  
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 545 550 555 560  
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 Cys Ser Gln Thr Trp Asp Ser Phe Lys Cys Thr Cys Asp Glu Thr Gly  
 580 585 590  
 Tyr Ser Gly Ala Thr Cys His Asn Ser Ile Tyr Glu Pro Ser Cys Glu  
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 Ala Tyr Lys His Leu Gly Gln Thr Ser Asn Tyr Tyr Trp Ile Asp Pro  
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 Asp Gly Ser Gly Pro Leu Gly Pro Leu Lys Val Tyr Cys Asn Met Thr  
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 Glu Asp Lys Val Trp Thr Ile Val Ser His Asp Leu Gln Met Gln Thr  
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 660 665 670  
 Tyr Ser Ala Ser Met Asp Gln Ile Ser Ala Ile Thr Asp Ser Ala Glu  
 675 680 685  
 Tyr Cys Glu Gln Tyr Val Ser Tyr Phe Cys Lys Met Ser Arg Leu Leu  
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 Asn Thr Pro Asp Gly Ser Pro Tyr Thr Trp Trp Val Gly Lys Ala Asn  
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 Glu Lys His Tyr Tyr Trp Gly Gly Ser Gly Pro Gly Ile Gln Lys Cys  
 725 730 735  
 Ala Cys Gly Ile Glu Arg Asn Cys Thr Asp Pro Lys Tyr Tyr Cys Asn  
 740 745 750  
 Cys Asp Ala Asp Tyr Lys Gln Trp Arg Lys Asp Ala Gly Phe Leu Ser  
 755 760 765  
 Tyr Lys Asp His Leu Pro Val Ser Gln Val Val Val Gly Asp Thr Asp  
 770 775 780  
 Arg Gln Gly Ser Glu Ala Lys Leu Ser Val Gly Pro Leu Arg Cys Gln  
 785 790 795 800  
 Gly Asp Arg Asn Tyr Trp Asn Ala Ala Ser Phe Pro Asn Pro Ser Ser  
 805 810 815  
 Tyr Leu His Phe Ser Thr Phe Gln Gly Glu Thr Ser Ala Asp Ile Ser  
 820 825 830  
 Phe Tyr Phe Lys Thr Leu Thr Pro Trp Gly Val Phe Leu Glu Asn Met  
 835 840 845  
 Gly Lys Glu Asp Phe Ile Lys Leu Glu Leu Lys Ser Ala Thr Glu Val  
 850 855 860  
 Ser Phe Ser Phe Asp Val Gly Asn Gly Pro Val Glu Ile Val Val Arg  
 865 870 875 880  
 Ser Pro Thr Pro Leu Asn Asp Asp Gln Trp His Arg Val Thr Ala Glu  
 885 890 895  
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**4476.**

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 <211> 334  
 <212> DNA  
 <213> Homo sapiens

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 35 40 45  
 Glu Gly Leu Ala Asp Ser Gly Pro Gly Gly Ala Gly Arg Pro Ala Ala  
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 <212> PRT  
 <213> Homo sapiens

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 240  
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&lt;210&gt; 5308

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5308

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Leu	Leu	Ile	Asp	Leu	Thr	Trp	Thr	His	Arg	Gly	Gly	Lys	Thr	Cys	Gly
			20					25					30		
Asp	His	His	Arg	Gly	His	Gly	Pro	Thr	Ser	Val	Ile	Trp	Glu	Thr	Gly
		35					40					45			
Leu	Gly	Arg	Gly	Gly	Asp	Phe	Pro	Lys	Ser	Pro	Ser	Ile	His	Asp	Arg
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Gly	Arg	Ala	Trp	Glu	Leu	Gly	Thr	Gln	Gly	Ser	Ser	Lys	Arg	Ser	Arg
65					70				75					80	
Ser	Leu	Cys	Tyr	Pro	Gln	Ile	His	Lys	Leu	Arg	Ile	Thr	Cys	Ile	His
			85					90					95		
Phe	Pro	Pro	Pro	Trp	Thr	Leu	Cys	Phe	Glu	Leu	Phe	Cys	Leu	Pro	Asp
			100					105					110		

&lt;210&gt; 5309

&lt;211&gt; 2078

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5309

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&lt;210&gt; 5310

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5310

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			20					25					30		
Thr	Val	Pro	Glu	Cys	Ala	Ile	Cys	Leu	Gln	Thr	Cys	Val	His	Pro	Val
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Ser	Leu	Pro	Cys	Lys	His	Val	Phe	Cys	Tyr	Leu	Cys	Val	Lys	Gly	Ala
	50				55						60				
Ser	Trp	Leu	Gly	Lys	Arg	Cys	Ala	Leu	Cys	Arg	Gln	Glu	Ile	Pro	Glu
65				70						75				80	
Asp	Phe	Leu	Asp	Lys	Pro	Thr	Leu	Leu	Ser	Pro	Glu	Glu	Leu	Lys	Ala
			85						90					95	
Ala	Ser	Arg	Gly	Asn	Gly	Glu	Tyr	Ala	Trp	Tyr	Tyr	Glu	Gly	Arg	Asn
			100					105					110		
Gly	Trp	Trp	Gln	Tyr	Asp	Glu	Arg	Thr	Ser	Arg	Glu	Leu	Glu	Asp	Ala
		115				120						125			
Phe	Ser	Lys	Gly	Lys	Lys	Asn	Thr	Glu	Met	Leu	Ile	Ala	Gly	Phe	Leu
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Tyr	Val	Ala	Asp	Leu	Glu	Asn	Met	Val	Gln	Tyr	Arg	Arg	Asn	Glu	His
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Gly	Val	Ala	Gly	Leu	Arg	Leu	Asp	Cys	Asp	Ala	Asn	Thr	Val	Asn	Leu
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Ala	Arg	Glu	Ser	Ser	Ala	Asp	Gly	Ala	Asp	Ser	Val	Ser	Ala	Gln	Ser
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Gly	Ala	Ser	Val	Gln	Pro	Leu	Val	Ser	Ser	Val	Arg	Pro	Leu	Thr	Ser

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Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser Pro Asp Ala Ser		
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Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu Ser Gly Asp Asn		240
	245	250
Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser		255
	260	265
Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr		270
	275	280
Glu Ser Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala		285
	290	295
Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln		300
305	310	315
Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala		320
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Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg Arg Pro Asp Gly		335
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Gln Cys Thr Val Thr Glu Val		350
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<210> 5311  
 <211> 572  
 <212> DNA  
 <213> Homo sapiens

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<210> 5312  
 <211> 190  
 <212> PRT  
 <213> Homo sapiens

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Ile Lys Ser Ser Asp Thr Arg Cys Cys Glu Leu Cys Lys Tyr Glu Phe
                35           40           45
Ile Met Glu Thr Lys Leu Lys Pro Leu Arg Lys Trp Glu Lys Leu Gln
                50           55           60
Met Thr Ser Ser Glu Arg Arg Lys Ile Met Cys Ser Val Thr Phe His
65                70           75           80
Val Ile Ala Ile Thr Cys Val Val Trp Ser Leu Tyr Val Leu Ile Asp
                85           90           95
Arg Pro Ala Glu Glu Ile Lys Gln Gly Gln Ala Thr Gly Ile Leu Glu
                100          105          110
Trp Pro Phe Trp Thr Lys Leu Val Val Val Ala Ile Gly Phe Thr Arg
                115          120          125
Gly Leu Leu Phe Met Tyr Val Gln Cys Lys Val Tyr Val Gln Leu Trp
                130          135          140
Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro
145                150          155          160
Glu Thr Ser Lys Lys Asn Ile Phe Glu Lys Ser Pro Leu Thr Glu Pro
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Asn Phe Glu Asn Lys His Gly Tyr Gly Ile Cys His Ser Asp
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<210> 5314  
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 <212> PRT  
 <213> Homo sapiens

<400> 5314  
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<211> 2298
<212> DNA
<213> Homo sapiens
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4484

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&lt;210&gt; 5316

&lt;211&gt; 544

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5316

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			20					25					30		
Glu	Phe	Thr	Asp	Leu	Gly	His	Arg	Leu	Asp	Cys	Leu	Asp	Leu	Lys	Gly
		35				40					45				
Glu	Lys	Leu	Asp	Tyr	Lys	Thr	Cys	Glu	Ala	Leu	Glu	Glu	Val	Phe	Lys

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Arg Leu Gln Phe Lys Val Val Asp Leu Glu Gln Thr Asn Leu Asp Glu		
65	70	75
Asp Gly Ala Ser Ala Leu Phe Asp Met Ile Glu Tyr Tyr Glu Ser Ala		
85	90	95
Thr His Leu Asn Ile Ser Phe Asn Lys His Ile Gly Thr Arg Gly Trp		
100	105	110
Gln Ala Ala Ala His Met Met Arg Lys Thr Ser Cys Leu Gln Tyr Leu		
115	120	125
Asp Ala Arg Asn Thr Pro Leu Leu Asp His Ser Ala Pro Phe Val Ala		
130	135	140
Arg Ala Leu Arg Ile Arg Ser Ser Leu Ala Val Leu His Leu Glu Asn		
145	150	155
Ala Ser Leu Ser Gly Arg Pro Leu Met Leu Leu Ala Thr Ala Leu Lys		
165	170	175
Met Asn Met Asn Leu Arg Glu Leu Tyr Leu Ala Asp Asn Lys Leu Asn		
180	185	190
Gly Leu Gln Asp Ser Ala Gln Leu Gly Asn Leu Leu Lys Phe Asn Cys		
195	200	205
Ser Leu Gln Ile Leu Asp Leu Arg Asn Asn His Val Leu Asp Ser Gly		
210	215	220
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225	230	235
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245	250	255
Leu Gly Met Thr Leu Ser His Thr Gln Ser Leu Glu Thr Leu Asn Leu		
260	265	270
Gly His Asn Pro Ile Gly Asn Glu Gly Val Arg His Leu Lys Asn Gly		
275	280	285
Leu Ile Ser Asn Arg Ser Val Leu Arg Leu Gly Leu Ala Ser Thr Lys		
290	295	300
Leu Thr Cys Glu Gly Ala Val Ala Val Ala Glu Phe Ile Ala Glu Ser		
305	310	315
Pro Arg Leu Leu Arg Leu Asp Leu Arg Glu Asn Glu Ile Lys Thr Gly		
325	330	335
Gly Leu Met Ala Leu Ser Leu Ala Leu Lys Val Asn His Ser Leu Leu		
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Arg Leu Asp Leu Asp Arg Glu Pro Lys Lys Glu Ala Val Lys Ser Phe		
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Arg Asn Leu Val Leu Ala Arg Glu Arg Glu Glu Lys Glu Gln Pro Pro		
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Gln Leu Ser Ala Ser Met Pro Glu Thr Thr Ala Thr Glu Pro Gln Pro		
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420	425	430
Pro Ser Pro Asp Ser Asp Ser Asp Ser Asp Ser Asp Gly Glu Glu Glu		
435	440	445
Glu Glu Glu Glu Gly Glu Arg Asp Glu Thr Pro Ser Gly Ala Ile Asp		
450	455	460
Thr Arg Asp Thr Gly Ser Glu Pro Gln Pro Pro Glu Pro Pro		
465	470	475
Arg Ser Gly Pro Pro Leu Pro Asn Gly Leu Lys Pro Glu Phe Ala Leu		
480		

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Cys	Gly	Leu	Glu	His	Glu	Leu	Ser	Cys	Ser	Lys	Asn	Glu	Lys	Glu	Leu				
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&lt;210&gt; 5317

&lt;211&gt; 889

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5317

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&lt;210&gt; 5318

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5318

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<212> DNA
<213> Homo sapiens
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4488



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Gly Ser Leu Gln Pro Pro Pro Pro Arg Phe Lys Gln Phe Ser Cys Pro  
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<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 5322

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5322

Met	Leu	Lys	Arg	Glu	Leu	Glu	Arg	Glu	Arg	Leu	Val	Thr	Thr	Ala	Leu
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Asp	Ser	Pro	Asn	Val	Tyr	Thr	Glu	Lys	Lys	Glu	Ile	Ala	Ile	Leu	Arg
			35				40					45			
Glu	Arg	Leu	Thr	Glu	Leu	Glu	Arg	Lys	Leu	Thr	Phe	Glu	Gln	Gln	Arg
			50			55					60				
Ser	Asp	Leu	Trp	Glu	Arg	Leu	Tyr	Val	Glu	Ala	Lys	Asp	Gln	Asn	Gly
				70					75					80	
Lys	Gln	Gly	Thr	Asp	Gly	Lys	Lys	Lys	Gly	Gly	Arg	Gly	Ser	His	Arg
			85					90						95	
Ala	Lys	Asn	Lys	Ser	Lys	Glu	Thr	Phe	Leu	Gly	Ser	Val	Lys	Glu	Thr
			100					105					110		
Phe	Asp	Ala	Met	Lys	Asn	Ser	Thr	Lys	Glu	Phe	Val	Arg	His	His	Lys
			115				120					125			
Glu	Lys	Ile	Lys	Gln	Ala	Lys	Glu	Ala	Val	Lys	Glu	Asn	Leu	Lys	Lys
			130			135					140				
Phe	Ser	Asp	Ser	Val	Lys	Ser	Thr	Phe	Arg	His	Phe	Lys	Asp	Thr	Thr
					150					155				160	
Lys	Asn	Ile	Phe	Asp	Glu	Lys	Gly	Asn	Lys	Arg	Phe	Gly	Ala	Thr	Lys
			165					170						175	
Glu	Ala	Ala	Glu	Lys	Pro	Arg	Thr	Val	Phe	Ser	Asp	Tyr	Leu	His	Pro

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Gln Tyr Lys	Ala Pro Thr	Glu Asn His	His Asn Arg	Pro Tyr Tyr	Ala
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Lys					

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 <211> 475  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

<400> 5324  
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 Met Arg Thr Leu Gly Thr Thr Ser Thr Ser Pro Pro Tyr Ser Ala His  
 35 40 45  
 Gly Arg Arg Pro Tyr Lys Trp Arg Gly Val Gly Arg Lys Ala Trp Gln  
 50 55 60  
 Leu Trp Thr Ala Pro Arg Ser Leu Leu Leu Ser Val Gly Leu Ala Ser  
 65 70 75 80  
 Leu Arg Arg Ala Ser Gln His Ala Val Met Leu Pro Gln Leu Leu Ala  
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 Val Ser Cys Leu Pro Asp Pro Gly Arg  
 100 105

<210> 5325  
 <211> 938  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 5325

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 938

&lt;210&gt; 5326

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5326

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 Gly Ala Leu Gly Gln Gln Ser Leu Gly Ala Arg Ala Leu Ala Ser  
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 Ala Gly Ser Glu Ser Arg Asp Glu Tyr Ser Tyr Val Val Val Gly Ala  
 35 40 45  
 Gly Ser Ala Gly Cys Val Leu Ala Gly Arg Leu Thr Glu Asp Pro Ala  
 50 55 60  
 Glu Arg Val Leu Leu Leu Glu Ala Gly Pro Lys Asp Val Arg Ala Gly  
 65 70 75 80  
 Ser Lys Arg Leu Ser Trp Lys Ile His Met Pro Ala Ala Leu Val Ala  
 85 90 95  
 Asn Leu Cys Asp Asp Arg Tyr Asn Trp Cys Tyr His Thr Glu Val Gln

	100		105		110
Arg Gly Leu Asp Gly Arg Val Leu Tyr Trp Pro Arg Gly Arg Val Trp					
115		120		125	
Gly Gly Ser Ser Ser Leu Asn Ala Met Val Tyr Val Arg Gly His Ala					
130		135		140	
Glu Asp Tyr Glu Arg Trp Gln Arg Gln Gly Ala Arg Gly Trp Asp Tyr					
145		150		155	160
Ala His Cys Leu Pro Tyr Phe Arg Lys Ala Gln Gly His Xaa Ala Gly					
	165		170		175
Arg Gln Pro Val Pro Gly Arg Asp Gly Pro Leu Arg Val Ser Arg Gly					
	180		185		190
Lys Thr Asn His Pro Leu His Cys Ala Phe Leu Glu Ala Thr Gln Gln					
	195		200		205
Ala Gly Tyr Pro Leu Thr Glu Asp Met Asn Gly Phe Gln Gln Glu Gly					
	210		215		220
Phe Gly Trp Met Asp Met Thr Ile His Glu					
225		230			

&lt;210&gt; 5327

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5327

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 2084

&lt;210&gt; 5328

&lt;211&gt; 694

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5328

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			20					25					30		
Arg	Cys	Val	Val	Ala	Ala	Phe	Trp	Ala	Asp	Val	Asp	Asn	Arg	Arg	Ala
		35					40					45			
Gly	Asp	Val	Tyr	Tyr	Arg	Glu	Ala	Thr	Asp	Pro	Ala	Met	Leu	Arg	Arg

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Ala Thr Glu Asp Val Arg His Tyr Phe Pro Glu Leu Leu Asp Phe Asn		
65	70	75
Ala Thr Trp Val Phe Val Ala Thr Trp Tyr Arg Val Thr Phe Phe Gly		80
	85	90
Gly Ser Ser Ser Ser Pro Val Asn Thr Phe Gln Thr Val Leu Ile Thr		95
	100	105
Asp Gly Lys Leu Ser Phe Thr Ile Phe Asn Tyr Glu Ser Ile Val Trp		110
	115	120
Thr Thr Gly Thr His Ala Ser Ser Gly Gly Asn Ala Thr Gly Leu Gly		125
	130	135
Gly Ile Ala Ala Gln Ala Gly Phe Asn Ala Gly Asp Gly Gln Arg Tyr		140
145	150	155
Phe Ser Ile Pro Gly Ser Arg Thr Ala Asp Met Ala Glu Val Glu Thr		160
	165	170
Thr Thr Asn Val Gly Val Pro Gly Arg Trp Ala Phe Arg Ile Asp Asp		175
	180	185
Ala Gln Val Arg Val Gly Gly Cys Gly His Thr Thr Ser Val Cys Leu		190
	195	200
Ala Leu Arg Pro Cys Leu Asn Gly Gly Lys Cys Ile Asp Asp Cys Val		205
210	215	220
Thr Gly Asn Pro Ser Tyr Thr Cys Ser Cys Leu Ser Gly Phe Thr Gly		225
	230	235
Arg Arg Cys His Leu Asp Val Asn Glu Cys Ala Ser Gln Pro Cys Gln		240
	245	250
Asn Gly Gly Thr Cys Thr His Gly Ile Asn Ser Phe Arg Cys Gln Cys		255
	260	265
Pro Ala Gly Phe Gly Gly Pro Thr Cys Glu Thr Ala Gln Ser Pro Cys		270
	275	280
Asp Thr Lys Glu Cys Gln His Gly Gly Gln Cys Gln Val Glu Asn Gly		285
290	295	300
Ser Ala Val Cys Val Cys Gln Ala Gly Tyr Thr Gly Ala Ala Cys Glu		305
	310	315
Met Asp Val Asp Asp Cys Ser Pro Asp Pro Cys Leu Asn Gly Gly Ser		320
	325	330
Cys Val Asp Leu Val Gly Asn Tyr Thr Cys Leu Cys Ala Glu Pro Phe		335
	340	345
Lys Gly Leu Arg Cys Glu Thr Gly Asp His Pro Val Pro His Ala Cys		350
	355	360
Leu Ser Ala Pro Cys His Asn Gly Gly Thr Cys Val Asp Ala Asp Gln		365
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Gly Tyr Val Cys Glu Cys Pro Glu Gly Phe Met Gly Leu Asp Cys Arg		385
	390	395
Glu Arg Val Xaa Pro Met Thr Val Ser Ala Ala Thr Glu Ala Asp Ala		400
	405	410
Trp Ala Pro Thr Pro Pro Ser Ala His Ala Pro Cys Gly Xaa Ser Leu		415
	420	425
Gly Phe Ser Val Asn Leu Lys Ser Gln Pro Xaa Pro Cys Asn Met Asn		430
	435	440
Thr Gln Cys Pro Asp Gly Gly Tyr Cys Met Glu His Gly Gly Ser Tyr		445
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Leu Cys Val Cys His Thr Asp His Asn Ala Ser His Ser Leu Pro Ser		465
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<211> 2582
<212> DNA
<213> Homo sapiens
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<211> 308

<212> PRT

<213> Homo sapiens

<400> 5330

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<213> Homo sapiens

<400> 5332

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&lt;210&gt; 5335

&lt;211&gt; 4282

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5335

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&lt;211&gt; 766

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5336

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Val	Ser	Leu	Val	Leu	Tyr
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Arg	Leu	Ser	Ser	Tyr	Tyr
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&lt;211&gt; 2742

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5337

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&lt;210&gt; 5342

&lt;211&gt; 690

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5342

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 <212> PRT  
 <213> Homo sapiens

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 Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser Ser Ile  
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 1912

&lt;210&gt; 5346

&lt;211&gt; 534

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5346

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Ser	Val	Lys	Ala	Leu	Leu	Leu	Lys	Gly	Lys	Ala	Pro	Val	Asp	Pro	Glu
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Cys	Thr	Ala	Lys	Val	Gly	Lys	Ala	His	Val	Tyr	Cys	Glu	Gly	Asn	Asp



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Leu Val Ala Cys Ser Gly Asn Leu Asn Lys Ala Lys Glu Ile Phe Gln		110
	115	120
Lys Lys Phe Leu Asp Lys Thr Lys Asn Asn Trp Glu Asp Arg Glu Lys		125
	130	135
Phe Glu Lys Val Pro Gly Lys Tyr Asp Met Leu Gln Met Asp Tyr Ala		140
145	150	155
Thr Asn Thr Gln Asp Glu Glu Glu Thr Lys Lys Glu Glu Ser Leu Lys		160
	165	170
Ser Pro Leu Lys Pro Glu Ser Gln Leu Asp Leu Arg Val Gln Glu Leu		175
	180	185
Ile Lys Leu Ile Cys Asn Val Gln Ala Met Glu Glu Met Met Met Glu		190
	195	200
Met Lys Tyr Asn Thr Lys Lys Ala Pro Leu Gly Lys Leu Thr Val Ala		205
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Gln Ile Lys Ala Gly Tyr Gln Ser Leu Lys Lys Ile Glu Asp Cys Ile		220
225	230	235
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	245	250
Tyr Thr Arg Ile Pro His Asp Phe Gly Leu Arg Thr Pro Pro Leu Ile		255
	260	265
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	275	280
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	290	295
Pro Glu His Pro Leu Asp Gln His Tyr Arg Asn Leu His Cys Ala Leu		300
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Arg Pro Leu Asp His Glu Ser Tyr Glu Phe Lys Val Ile Ser Gln Tyr		320
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	355	360
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	370	375
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385	390	395
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	405	410
Met Ser Ser Lys Ser Ala Asn Tyr Cys Phe Ala Ser Arg Leu Lys Asn		415
	420	425
Thr Gly Leu Leu Leu Leu Ser Glu Val Ala Leu Gly Gln Cys Asn Glu		430
	435	440
Leu Leu Glu Ala Asn Pro Lys Ala Glu Gly Leu Leu Gln Gly Lys His		445
	450	455
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<210> 5347<211> 2893
<212> DNA
<213> Homo sapiens
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<211> 694

<212> PRT

<213> Homo sapiens

<400> 5348

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			20					25					30		
Tyr	Leu	Leu	Leu	Pro	Pro	Pro	Thr	Leu	Leu	Gln	Asp	Glu	Leu	Leu	Phe
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Leu	Gly	Gly	Pro	Ala	Ser	Ser	Ala	Tyr	Ala	Leu	Ser	Pro	Phe	Ser	Ala
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Leu	Asp	Pro	Ala	Ala	Pro	Pro	Glu	Gly	Gln	Leu	Leu	Arg	Glu	Val	Arg
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Ala	Leu	Gly	Val	Pro	Phe	Val	Pro	Arg	Thr	Ser	Val	Asp	Ala	Trp	Leu
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Val	His	Ser	Val	Ala	Ala	Gly	Ser	Ala	Asp	Glu	Ala	His	Gly	Leu	Leu
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Gly	Val	Leu	Arg	Glu	Lys	His	Glu	Ala	Val	Asp	His	Ser	Ser	Gln	His
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Pro	Glu	Asn	Ser	Leu	Glu	Gly	Ile	Ser	Leu	Gly	Asp	Ile	Pro	Leu	Pro
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Phe	Ser	Gln	Ala	Ile	Ser	Gln	Asp	Val	Asn	Leu	His	Glu	Ala	Ile	Leu
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Leu	Cys	Pro	Asn	Asn	Thr	Phe	Arg	Arg	Asp	Pro	Thr	Ala	Arg	Thr	Ser
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Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
          385          390          395          400
Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Ser Asp
          405          410          415
Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
          420          425          430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
          435          440          445
Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
          450          455          460
Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
          465          470          475          480
Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
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Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
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Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
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Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
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          565          570          575
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          580          585          590
Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
          595          600          605
Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
          610          615          620
Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
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Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
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Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
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Leu Ile Val Pro Lys Glu Leu Val Ala Ser Gly His Lys Lys Glu Thr
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&lt;210&gt; 5349

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5349

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 His Lys Val Ser Ser Gln Glu Gly Glu Gly Arg Ile Pro Leu Pro Gly  
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 Lys Ala Glu Val Arg Glu Ala Gly Gln Pro Ile Pro Val Ser Leu Leu  
 65 70 75 80  
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 85 90 95  
 Gly His Glu Gly Leu Gly Arg Leu Leu Trp Gln Ser Gly Pro Leu Gln  
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 Asn Cys Asp Thr Arg Asn Gly Ser Asn Lys Ser Asp Phe Asp Trp His  
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 50 55 60  
 Val Ser Lys Pro Ser Leu Phe Ser Ser Val Gln Leu Tyr Arg Gln Ser  
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<400> 5354  
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 Ala Glu Leu Gly Met Gly Thr Pro Pro Ala Ser Pro Pro Gln Leu Arg  
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 Gly His Ala Asp Val Gln Ile Ser Trp Asn Gln Gly Ile Asp Leu Trp  
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 Trp His Glu Leu Met Gln Glu Ala Gly Asp Glu Cys Glu Pro Glu Trp  
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 Cys Asp Ala Glu Asp Pro Leu Phe Ile Leu Tyr Thr Ser Gly Ser Thr  
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 Gly Lys Pro Lys Gly Val Val His Thr Val Gly Gly Tyr Met Leu Tyr  
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Trp	Tyr His Arg Val Val Gly Ala Gln Arg Cys Pro Ile Val Asp Thr					
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Glu	Gly Tyr Leu Val Phe Lys Gln Pro Trp Pro Gly Ile Met Arg Thr					
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Val	Tyr Gly Asn His Glu Arg Phe Glu Thr Thr Tyr Ser Lys Lys Phe					
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Pro	Gly Tyr Tyr Val Thr Gly Asp Gly Cys Gln Arg Asp Gln Asp Gly					
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Tyr	Tyr Trp Ile Thr Gly Arg Ile Asp Asp Met Leu Asn Val Ser Gly					
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His	Leu Leu Ser Thr Ala Glu Val Glu Ser Ala Leu Val Glu His Glu					
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Ala	Val Ala Glu Ala Ala Val Val Gly His Pro His Pro Val Lys Gly					
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Glu	Cys Leu Tyr Cys Phe Val Thr Leu Cys Asp Gly His Thr Phe Ser					
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Pro	Lys Leu Thr Glu Glu Leu Lys Lys Gln Ile Arg Glu Lys Ile Gly					
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Pro	Ile Ala Thr Pro Asp Tyr Ile Gln Asn Ala Pro Gly Leu Pro Lys					
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Thr	Arg Ser Gly Lys Ile Met Arg Arg Val Leu Arg Lys Ile Ala Gln					
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Asn	Asp His Asp Leu Gly Asp Met Ser Thr Val Ala Asp Pro Ser Val					
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Ile	Ser His Leu Phe Ser His Arg Cys Leu Thr Ile Gln					
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&lt;210&gt; 5355

&lt;211&gt; 1596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5355

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&lt;210&gt; 5356

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5356

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Cys Arg Phe His Ser Phe Lys Lys Val Leu Tyr Glu Met Gly Pro Glu
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Tyr Ser Ser Asn Val Glu Leu Ala Ser Phe His Ser Thr Ser Lys Gly
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Tyr Met Gly Glu Cys Gly Tyr Arg Gly Gly Tyr Met Glu Val Val Asn
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Leu His Pro Glu Ile Lys Gly Gln Leu Val Lys Leu Leu Ser Val Arg
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Leu Cys Pro Pro Val Ser Gly Gln Ala Ala Met Asp Ile Val Val Asn
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Arg Glu Gly Thr Tyr His Phe Arg Met Thr Ile Leu Pro Pro Val Glu
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&lt;211&gt; 1722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5357

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&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5358

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 <212> PRT  
 <213> Homo sapiens

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 Ser Leu Glu Ser Ala Ala Ser Ser Ala Ile Pro Pro Lys Tyr Val Asn  
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 Lys Ser His Leu Trp Arg Ser Ala Ser Leu Glu Ser Val Glu Ser Pro  
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 Lys Ser Asp Glu Glu Ala Glu Ser Thr Lys Glu Ala Gln Asn Glu Leu  
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 Ser Pro Gln Lys Ser Cys Ser Pro Ser Phe Asp Thr Pro Glu Ser Gln  
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 225 230 235 240  
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His Ser Thr Leu Glu Gln Leu Thr Glu Lys Lys Ile Lys His Leu Glu
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          485          490          495
Glu Trp Asp Val Gly Arg Leu Gln Ala Glu Glu Ala Gly Leu Arg Glu
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Lys Leu Thr Leu Ala Leu Lys Glu Asn Ser Arg Leu Gln Lys Glu Ile
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Ser Ala Glu Leu Leu Ala Gln Glu Glu Arg Phe Ala Ala Val Leu Lys
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Glu Tyr Glu Leu Lys Cys Arg Asp Leu Gln Asp Arg Asn Asp Glu Leu
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Gly Pro Ala Gly Ile Ser Phe Leu Gly Asn Ser Ala Pro Val Ser Ile
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Pro Cys Cys Thr Gln Ala Leu Cys Gly Leu Ala Leu Arg His His Ser
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Glu Gln Leu Glu Leu Glu Arg Ala Leu Lys Leu Gln Pro Cys Ala Ser
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 <212> DNA  
 <213> Homo sapiens

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<211> 165

<212> PRT

<213> Homo sapiens

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Val	Phe	Lys	Pro	Ile	Asn	Glu	Pro	Val	Ser	Leu	Phe	Gly	Ile	Tyr	Asn
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<210> 5363

<211> 894

<212> DNA

<213> Homo sapiens

<400> 5363

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&lt;210&gt; 5364

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5364

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Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
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Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
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Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
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Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
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Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
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Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
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Gly	Gly	Gly	Xaa	Gln	Glu	Gly	Glu	Ser	Glu	Pro	Pro	Val	Thr	Arg	Xaa
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Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
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Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
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&lt;210&gt; 5365

&lt;211&gt; 1824



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5365

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<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

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His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
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Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
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Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70					75					80
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
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Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
			100					105					110		
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Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
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Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
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Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
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Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
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Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Leu	Gln	Leu	Glu
225					230					235					240
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
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Pro	Pro	Thr	Arg	Pro	Arg	Thr	Val	Cys	Arg	Val	Pro	Gly	Gln	Ile	Glu

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Ser Ser Pro Glu Gly Ser Gly Phe Cys Ser Lys Asp Arg Phe Val Ala		
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Trp Glu Val Gly Met Asn Ile Thr Gly Asp Ala Leu Trp Ala Leu Gly		
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Val Cys Arg Asp Asn Val Ser Arg Lys Asp Arg Val Leu Lys Cys Pro		
	370	375
Glu Asn Gly Phe Trp Val Val Gln Leu Ser Lys Gly Thr Lys Tyr Leu		
385	390	395
Ser Thr Phe Ser Ala Leu Thr Pro Val Met Leu Met Glu Pro Pro Ser		
	405	410
His Met Gly Ile Phe Leu Asp Phe Glu Ala Gly Glu Val Ser Phe Tyr		
	420	425
Ser Val Ser Asp Gly Ser His Leu His Thr Tyr Ser Gln Ala Thr Phe		
	435	440
Pro Gly Pro Leu Gln Pro Phe Phe Cys Leu Gly Ala Pro Lys Ser Gly		
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Gln Met Val Ile Ser Thr Val Thr Met Trp Val Lys Gly		
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&lt;210&gt; 5367

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5367

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&lt;210&gt; 5368

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 <213> Homo sapiens

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 Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr  
 50 55 60  
 Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile  
 65 70 75 80  
 Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu  
 85 90 95  
 Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu  
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 His Gln Ala Pro Glu Ala Ala Pro Thr  
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 <212> DNA  
 <213> Homo sapiens

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<400> 5370

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      20           25           30
Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys
      35           40           45
Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro
      50           55           60
Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala
65           70           75           80
His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro
      85           90           95
Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg
      100          105          110
Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Pro Leu Pro Pro Ser Pro
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Pro Phe Leu Phe
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<400> 5371

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<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

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			20					25				30			
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
		35				40					45				
Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
	50					55				60					
Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
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Asn	Asn	Phe	Val	Tyr	Leu	Ile	Gly	Gly	Asp	Asn	Asn	Val	Gln	Gly	Phe
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Arg	Ala	Glu	Ser	Arg	Cys	Trp	Arg	Tyr	Asp	Pro	Arg	His	Asn	Arg	Trp
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Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
		115					120					125			
Cys	Val	Val	Gly	Arg	Tyr	Ile	Tyr	Ala	Val	Ala	Gly	Arg	Asp	Tyr	His
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Asn	Asp	Leu	Asn	Ala	Val	Glu	Arg	Tyr	Asp	Pro	Ala	Thr	Asn	Ser	Trp
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			165					170				175			
Thr	Leu	Glu	Gly	Lys	Met	Tyr	Ile	Thr	Cys	Gly	Arg	Arg	Gly	Glu	Asp
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			245					250						255	
Gln	Trp	Ser	Ser	Val	Cys	Pro	Leu	Pro	Ala	Gly	His	Gly	Glu	Pro	Gly
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Ile	Ala	Val	Leu	Asp	Asn	Arg	Ile	Tyr	Val	Leu	Gly	Gly	Arg	Ser	His
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Asp	Cys	Trp	Glu	Glu	Gly	Pro	Gln	Leu	Asp	Asn	Ser	Ile	Ser	Gly	Leu
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Ala	Ala	Cys	Val	Leu	Thr	Leu	Pro	Arg	Ser	Leu	Leu	Leu	Glu	Pro	Pro
			325					330						335	
Arg	Gly	Thr	Pro	Asp	Arg	Ser	Gln	Ala	Asp	Pro	Asp	Phe	Ala	Ser	Glu
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Val	Met	Ser	Val	Ser	Asp	Trp	Glu	Glu	Phe	Asp	Asn	Ser	Ser	Glu	Asp
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&lt;210&gt; 5373

&lt;211&gt; 4221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5373

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 <212> PRT  
 <213> Homo sapiens

<400> 5374

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		20						25					30		
Lys	Lys	Ser	Leu	Gln	Glu	Lys	Gly	Lys	Leu	Ser	Ala	Glu	Glu	Asn	Pro
		35					40					45			
Asp	Asp	Ser	Glu	Val	Pro	Ser	Ser	Ser	Gly	Ile	Asn	Ser	Thr	Lys	Ser
	50					55					60				
Gln	Asp	Lys	Asp	Val	Asn	Glu	Gly	Glu	Thr	Ser	Asp	Gly	Val	Arg	Lys
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Phe	Cys	Leu	Arg	Leu																															

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785              790              795              800
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      805              810              815
Leu Gly Arg Gly Leu His Gln Leu Gly Leu Ile His Leu Ala Ile His
      820              825              830
Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile
      835              840              845
Glu Leu Asp Gln Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser
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 <213> Homo sapiens

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 Val Gln Leu Lys Ser Ile Ser Leu Phe Ala Phe Ser Glu Ala Ser Pro

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Ser Ser Leu Leu Lys Lys Asn Thr Cys Arg Cys His Leu Pro Arg Ile				
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Cys His Arg Pro Arg Thr Ile Ser Ile Phe Asn Pro Arg Asn His Thr				
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&lt;210&gt; 5377

&lt;211&gt; 1452

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5377

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<212> PRT

<213> Homo sapiens

<400> 5378

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Pro	Ser	Tyr	Ala	Lys	Lys	Val	Ala	Leu	Trp	Leu	Ala	Gly	Leu	Leu	Gly
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Cys	Leu	Asn	Arg	Asp	Pro	Ala	Arg	Val	Val	Val	Val	Asp	Cys	Lys	Lys
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Glu	Ala	Phe	Arg	Leu	Gln	Pro	Tyr	Asn	Gly	Val	Ala	Leu	Arg	Pro	Trp
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His Tyr Ala Leu Glu Asp Asp Pro Leu Ala Ala Phe Lys Gln Arg Gln				
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&lt;210&gt; 5379

&lt;211&gt; 3213

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5379

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&lt;210&gt; 5380

&lt;211&gt; 903

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5380

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Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala	Thr
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Gln	Arg	Leu	Arg	His	Glu	Phe	Asp	Ser	Glu	Arg	Ile	Pro	Glu	Leu	Ser
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Thr	Leu	Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser
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Ala	Asn	Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro
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&lt;210&gt; 5382

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5382

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&lt;210&gt; 5383

&lt;211&gt; 2027

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5383

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&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5384

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&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5390

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&lt;400&gt; 5392

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&lt;210&gt; 5393

&lt;211&gt; 4837

&lt;212&gt; DNA

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&lt;400&gt; 5393

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&lt;400&gt; 5395

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Asp	Glu	Ile	Ser	Lys	Pro	Glu	Val	Pro	Glu	Asp	Val	Asp	Leu	Asp	Leu
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Lys	Lys	Leu	Arg	Arg	Ser	Ser	Ser	Leu	Lys	Glu	Arg	Ser	Arg	Pro	Phe
			580					585					590		
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	610					615					620				
Glu	Ser	Val	Gly	Gly	Arg	Val	Ala	Glu	Arg	Lys	Gln	Val	Glu	Asn	Ala
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Lys	Ala	Ser	Lys	Lys	Asn	Gly	Asn	Val	Gly	Lys	Thr	Thr	Trp	Gln	Asn
				645					650					655	
Lys	Glu	Ser	Lys	Gly	Glu	Thr	Gly	Lys	Arg	Ser	Lys	Glu	Gly	His	Ser
		660					665					670			
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	675					680					685				
Glu	Asp	Asn	Ser	Phe	Leu	Lys	Gln	Gln	Ser	Pro	Gln	Glu	Pro	Lys	
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Thr	Thr	Gln	Asn	Gln	Lys	Ser	Gln	Asp	Val	Glu	Leu	Trp	Glu	Gly	Glu
			725					730					735		
Val	Val	Lys	Glu	Leu	Ser	Val	Glu	Glu	Gln	Ile	Lys	Arg	Asn	Arg	Tyr
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&lt;210&gt; 5397

&lt;211&gt; 561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5397

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420

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<210> 5398

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5398

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			20					25					30		
Thr	Ser	Ile	Pro	Ile	Ser	Pro	Pro	Leu	Thr	Pro	Gln	Asp	Ala	Asn	Glu
		35					40					45			
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Arg	Val	Ser	Leu	Gly	Leu	Pro	Arg	Trp	Leu	Cys	Pro	Pro	Phe	Cys	Leu
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Gly	Gly	Ser	Leu	Arg	Leu	Gly	Arg	Ala	Gln	Arg	Glu	Gly	Asp	Pro	Glu
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Gly	Leu	Ala	Asp	Ser	Gly	Pro	Pro	Cys	Glu	Leu	Arg	Phe	Glu	Glu	Glu
			100					105					110		
Ser	Arg	Pro	Pro	Arg	Val	Val	Gly	Glu	Ser	Thr	Gly	Arg	Lys	Ala	Gly
		115					120					125			
Ile	Ser	Thr	Glu	Gly	Leu	Ser	Ala	Ser	Phe	Asp	Leu	Phe	Gln	Ser	Phe
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<210> 5399

<211> 835

<212> DNA

<213> Homo sapiens

<400> 5399

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 300  
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<212> PRT  
<213> Homo sapiens

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35 40 45  
Pro Gln Gln Ser Ser Pro Tyr Pro Gly Gly Ser Tyr Gly Pro Pro Gly  
50 55 60  
Pro Gln Arg Tyr Pro Ile Gly Ile Gln Gly Arg Thr Pro Gly Ala Met  
65 70 75 80  
Ala Gly Met Gln Tyr Pro Gln Gln Gln Met Pro Pro Gln Tyr Gly Gln  
85 90 95  
Gln Gly Val Ser Gly Tyr Cys Gln Gln Gly Gln Gln Pro Tyr Tyr Ser  
100 105 110  
Gln Gln Pro Gln Pro Pro His Leu Pro Pro Gln Ala Gln Tyr Leu Pro  
115 120 125  
Ser Gln Ser Gln Gln Arg Tyr Gln Pro Gln Gln Asp Met Ser Gln Glu  
130 135 140  
Gly Tyr Gly Thr Arg Ser Gln Pro Pro Leu Ala Pro Gly Lys Pro Asn  
145 150 155 160  
His Glu Asp Leu Asn Leu Ile Gln Gln Glu Arg Pro Ser Ser Leu Pro  
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Val Arg His Tyr Cys Ala Asp Leu Glu Met  
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<210> 5401  
<211> 2674  
<212> DNA  
<213> Homo sapiens

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360  
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420  
aagaaggaca aaaagttatc agacatgcat caaatagtaa atatagatct tatgctggaa  
480  
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660  
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720  
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 1920  
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 2040  
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 2160  
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 2580  
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 2674

&lt;210&gt; 5402

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5402

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			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
		35					40					45			
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
	50					55					60				
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
65					70					75				80	
Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
			85					90						95	
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 <213> Homo sapiens

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<210> 5404  
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 <212> PRT  
 <213> Homo sapiens

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 Trp Val Gly Ala Leu Glu Leu Pro Arg Leu Gln Ala Pro Leu Ser Gln  
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 Pro Gly Thr His Ala Gly Ala Xaa Asp Pro Arg Pro Ser Leu Arg Lys  
 65 70 75 80  
 Ala Ser Leu Arg Ala Ala Ser Pro Ala Ala Ser Ser Ser Pro Trp Ala  
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 Arg Val Pro Cys Ser Arg Ala Arg Arg Pro Lys Ser Ala Glu Leu Leu  
 100 105 110  
 Arg Ile Pro Gly Thr Ser Thr Arg Pro Lys Lys Glu Arg Gly Cys Pro  
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<210> 5405  
 <211> 1609  
 <212> DNA  
 <213> Homo sapiens

<400> 5405

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<210> 5406  
 <211> 291  
 <212> PRT  
 <213> Homo sapiens

<400> 5406

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Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg
      50           55           60
Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg
65           70           75           80
Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn
      85           90           95
His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe
      100          105          110
Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn
      115          120          125
Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln
      130          135          140
Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn
145          150          155          160
Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp
      165          170          175
Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp
      180          185          190
Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr
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Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe
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Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser
225          230          235          240
Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg
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Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu
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<210> 5407  
 <211> 2010  
 <212> DNA  
 <213> Homo sapiens

<400> 5407

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<210> 5408  
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 <213> Homo sapiens

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 Arg Ile Phe Phe Ala Met Val Asp Phe Asp Glu Gly Ser Asp Val Phe  
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 225 230 235 240  
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 <213> Homo sapiens

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&lt;210&gt; 5410

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5410

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Pro	Leu	Leu	Ala	Glu	Leu	Pro	Phe	Pro	Ser	Val	Leu	Glu	Ser	Glu	Glu
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Thr	Pro	Asn	Gln	Phe	Ile										
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&lt;210&gt; 5411

&lt;211&gt; 2802

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5411

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<210> 5412  
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 <213> Homo sapiens

<400> 5412

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Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
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 195          200          205
Phe His Ile Ile Leu Asn Gln Ile Cys Leu Leu Pro Ile Leu Glu Ser
 210          215          220
Ser Cys Asp Asn Ile Gln Gly Phe Ile Glu Glu Phe Leu Gln Ile Phe
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Ser Ser Leu Leu Gln Glu Lys Arg Phe Leu Arg Asp Tyr Asp Ala Leu
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Thr Gln Glu Arg Arg Lys Lys Glu Ala Asn Lys Ala Thr Arg Ala Asn
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 <213> Homo sapiens

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&lt;210&gt; 5414

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5414

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Lys	Asp	Pro	Gly	Ser	Asp	Ile	Ser	Ala	Phe	Lys	Leu	Pro	Glu	His	Lys	
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Ser	Ser	Thr	Phe	Asn	Arg	Val	Asn	Ala	Asn	Met	Ser	His	Pro	Leu	Val	
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Leu	Gly	Lys	His	Pro	Leu	Leu	Ser	Gly	Gly	Thr	Lys	Arg	Asn	Pro	Cys	
			260					265				270				
Ser	Pro	Gln	Ala	Phe	Pro	Pro	Ala	Lys	Lys	Gln	Pro	Phe	Thr	Ile	His	
		275					280					285				
Glu	Glu	Lys	Pro	Thr	Ser	Ser	Asp	Cys	Ser	Pro	Val	Arg	Ser	Ser	Ser	
	290					295					300					
Trp	Arg	Arg	Leu	Pro	Ser	Ile	Leu	Thr	Ser	Thr	Val	Asn	Leu	Gln	Glu	
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Pro	Trp	Lys	Ser	Gly	Lys	Met	Thr	Pro	Pro	Leu	Cys	Lys	Cys	Gly	Arg	
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<210> 5415

<211> 1493

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5415

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<210> 5416  
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 <212> PRT  
 <213> Homo sapiens

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<210> 5417  
 <211> 2087  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5418

&lt;211&gt; 528

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5418

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			20					25					30		
Arg	Leu	Leu	Lys	Glu	Pro	Glu	Lys	Glu	Arg	Asp	Ser	Asp	Ser	Asp	Phe
			35				40					45			
Ser	Pro	Leu	Gln	Gln	Thr	Glu	Gly	Cys	Gln	Arg	Arg	Asp	Lys	His	Phe
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Arg	His	Ala	Glu	Asn	Pro	His	His	Pro	Leu	Lys	Thr	Ser	Ser	Arg	Ala

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          100          105          110
Pro Pro Pro Pro Ala Ala Pro Ala Pro Pro Lys Gly Glu Lys Glu Gly
          115          120          125
Gln Arg Pro Thr Gln Pro Val Tyr Gln Ile Gln Asn Arg Gly Met Gly
          130          135          140
Thr Ala Ala Pro Ala Ala Met Asp Pro Val Val Gly Gln Ala Lys Leu
145          150          155          160
Leu Pro Pro Glu Arg Met Lys His Ser Ile Lys Leu Val Asp Asp Gln
          165          170          175
Met Asn Trp Cys Asp Ser Ala Ile Glu Tyr Leu Leu Asp Gln Thr Asp
          180          185          190
Val Leu Val Val Gly Val Leu Gly Leu Gln Gly Thr Gly Lys Ser Met
          195          200          205
Val Met Ser Leu Leu Ser Ala Asn Thr Pro Glu Glu Asp Gln Arg Thr
          210          215          220
Tyr Val Phe Arg Ala Gln Ser Ala Glu Met Lys Glu Arg Gly Gly Asn
225          230          235          240
Gln Thr Ser Gly Ile Asp Phe Phe Ile Thr Gln Glu Arg Ile Val Phe
          245          250          255
Leu Asp Thr Gln Pro Ile Leu Ser Pro Ser Ile Leu Asp His Leu Ile
          260          265          270
Asn Asn Asp Arg Lys Leu Pro Pro Glu Tyr Asn Leu Pro His Thr Tyr
          275          280          285
Val Glu Met Gln Ser Leu Gln Ile Ala Ala Phe Leu Phe Thr Val Cys
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His Val Val Ile Val Val Gln Asp Trp Phe Thr Asp Leu Ser Leu Tyr
305          310          315          320
Arg Leu Trp Asp Leu Gly Cys Lys Cys Lys Ser Asn Ser His Ser Pro
          325          330          335
Gln Thr Pro Arg Phe Leu Gln Thr Ala Glu Met Val Lys Pro Ser Thr
          340          345          350
Pro Ser Pro Ser His Glu Ser Ser Ser Ser Gly Ser Asp Glu Gly
          355          360          365
Thr Glu Tyr Tyr Pro His Leu Val Phe Leu Gln Asn Lys Ala Arg Arg
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Glu Asp Phe Cys Pro Arg Lys Leu Arg Gln Met His Leu Met Ile Asp
385          390          395          400
Gln Leu Met Ala His Ser His Leu Arg Tyr Lys Gly Thr Leu Ser Met
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Leu Gln Cys Asn Val Phe Pro Gly Leu Pro Pro Asp Phe Leu Asp Ser
          420          425          430
Glu Val Asn Leu Phe Leu Val Pro Phe Met Asp Ser Glu Ala Glu Ser
          435          440          445
Glu Asn Pro Pro Arg Ala Gly Pro Gly Ser Ser Pro Leu Phe Ser Leu
          450          455          460
Leu Pro Gly Tyr Arg Gly His Pro Ser Phe Gln Ser Leu Val Ser Lys
465          470          475          480
Leu Arg Ser Gln Val Met Ser Met Ala Arg Pro Gln Leu Ser His Thr
          485          490          495
Ile Leu Thr Glu Lys Asn Trp Phe His Tyr Ala Ala Arg Ile Trp Asp

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 <211> 989  
 <212> DNA  
 <213> Homo sapiens

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 840  
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<210> 5420  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 5420  
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      50      55      60
Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys Gly Arg Ala Tyr Ala
      65      70      75      80
Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly Arg Thr Val Tyr Pro
      85      90      95
Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg Thr Arg Ser Arg Ser
      100      105      110
Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg Met Glu Leu Leu Glu
      115      120      125
Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly Thr Thr Asn Ile Asp
      130      135      140
Leu Pro Ala Ser Leu Arg Thr Val Pro Ser Ala Lys Glu Thr Ser Arg
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Gly Ile Gly Val Ser Ser Asn Gly Ala Lys Pro Glu Lys Ser
      165      170

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&lt;210&gt; 5421

&lt;211&gt; 1239

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5421

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&lt;210&gt; 5422

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5422

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Ser	Ser	Gly	Leu	Gly	Ser	Pro	Met	Ile	Val	Gly	Ser	Pro	Arg	Ala
			20					25					30	Leu
Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr
			35				40					45		Cys
Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser
			50				55				60			Met
Gly	Asn	Trp	Ser	Met	Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Val	Thr
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Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro
				85				90					95	Leu
Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu
			100					105					110	Phe
Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe
			115				120					125		Leu
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe
			130			135					140			Ser
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg
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Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu
			165					170					175	Leu
Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile
			180					185				190		Ser
Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val
			195				200					205		Ala
Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu
			210				215				220			Asn
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260

265

270

<210> 5423  
<211> 2427  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 5423

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1320

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&lt;210&gt; 5424

&lt;211&gt; 570

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5424

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			20					25					30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
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Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp
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Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys
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<212> DNA
<213> Homo sapiens
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<213> Homo sapiens
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			20					25					30		
Ser	Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala
		35				40						45			
Thr	Gln	Ala	Arg	Met	Cys	Pro	Val	Leu	Arg	Cys	Cys	Ser	Glu	Phe	Ile
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 <212> PRT  
 <213> Homo sapiens

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 His Glu Glu Glu Val Arg Val Pro Ala Leu Ser Trp Gly Arg Pro Arg  
 35 40 45  
 Ala Pro Ala Pro Ala Ser Lys Pro Arg Pro Arg Leu Asp Leu Asn Cys  
 50 55 60  
 Leu Trp Leu Arg Pro Gln Pro Ile Phe Leu Trp Lys Leu Arg Pro Arg  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5432

&lt;211&gt; 863

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5432

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Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

4614

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				485					490					495	
Gly	Gly	Thr	Pro	Pro	Ala	Ser	Gln	Ser	Pro	Phe	His	Arg	Ser	Leu	Ser
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Leu	Glu	Val	Gly	Gly	Glu	Pro	Leu	Gly	Thr	Ser	Gly	Ser	Gly	Pro	Pro
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Pro	Asn	Ser	Leu	Ala	His	Pro	Gly	Ala	Trp	Val	Pro	Gly	Pro	Pro	Pro
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Tyr	Leu	Pro	Arg	Gln	Gln	Ser	Asp	Gly	Ser	Leu	Leu	Arg	Ser	Gln	Arg
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Pro	Met	Gly	Thr	Ser	Arg	Arg	Gly	Leu	Arg	Gly	Pro	Ala	Gln	Val	Ser
			565					570						575	
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		580					585						590		
Ala	Gln	Ser	Pro	Cys	Ser	Val	Pro	Ser	Gln	Val	Pro	Thr	Pro	Gly	Phe
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Lys	Pro	Gly	Leu	Tyr	Pro	Leu	Gly	Pro	Pro	Ser	Phe	Gln	Pro	Ser	Ser
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Pro	Ala	Pro	Val	Trp	Arg	Ser	Ser	Leu	Gly	Pro	Pro	Ala	Pro	Leu	Asp
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Tyr	Ser	Gly	Pro	Thr	Arg	Ser	Trp	Ser	Pro	Phe	Arg	Ser	Met	Pro	Pro
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His	Arg	Ser	Pro	Asp	Phe	Leu	Leu	Ser	Tyr	Pro	Pro	Ala	Pro	Ser	Cys
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Phe	Pro	Pro	Asp	His	Leu	Gly	Tyr	Ser	Ala	Pro	Gln	His	Pro	Ala	Arg
			725						730					735	
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		740					745						750		
Arg	Gly	Pro	Ser	Pro	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Pro	Pro	Ala	His
	755					760						765			
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785				790					795						800
Pro	Trp	Gly	Pro	Pro	Glu	Pro	Leu	Leu	Leu	Tyr	Arg	Ala	Ala	Pro	Pro
			805					810						815	
Ala	Tyr	Gly	Arg	Gly	Gly	Glu	Leu	His	Arg	Gly	Ser	Leu	Tyr	Arg	Asn
		820					825						830		
Gly	Gly	Gln	Arg	Gly	Glu	Gly	Ala	Gly	Pro	Pro	Pro	Pro	Tyr	Pro	Thr
		835					840					845			
Pro	Ser	Trp	Ser	Leu	His	Ser	Glu	Gly	Gln	Thr	Arg	Ser	Tyr	Cys	
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&lt;210&gt; 5433

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5433

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&lt;210&gt; 5434

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5434

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		20				25					30				
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
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Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50				55					60					
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
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Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
		100				105					110				
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&lt;210&gt; 5435

&lt;211&gt; 617

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5435

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120  
ccttggtataa gtatactttg tataacttct ggcaaaccat aattatgaac tcacattact  
180  
atagtactat aatactgcag aaagggatct tgcgtttcag aaatgtcact catccagttt  
240



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 360  
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 617

&lt;210&gt; 5436

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5436

Met	Asn	Phe	Pro	Leu	Gly	Ser	Lys	Ala	Trp	Gly	Thr	Asn	Leu	Lys	Gln
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His	Pro	Leu	Ile	Ala	Arg	Ala	Lys	Gly	Lys	Thr	Met	Ala	Ser	Ser	Asp
		20						25					30		
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
		35					40					45			
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55					60				
Leu	Leu	Val	Arg	Lys	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys	
65					70				75					80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
			85						90					95	
Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
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Tyr	Tyr	Ser	Thr	Ile	Val	Met									
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&lt;210&gt; 5437

&lt;211&gt; 1422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5437

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 120  
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 180  
 gctgaggctg gcttaccttc gagccgttcc ttcattggat ttgctgctcc cttaccaaac  
 240  
 aagcgaaagg cttactcgga gcgtagaatc atgggggtact caatgcagga gatgtatgag  
 300

gtggtgtcca acgtccagga gtatcgtgag tttgtgccct ggtgtaagaa gtctctggtg  
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 660  
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 720  
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 1422

&lt;210&gt; 5438

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5438

Phe Arg Gly Gly Val Leu Tyr Trp Asp Ala Gly Ala Ala Gly Thr  
 1 5 10 15  
 Gly Ser Asn His Ala Leu Gly Ala Asn Val Glu Leu Trp Ile Met Leu  
 20 25 30  
 Leu Gln Val Val Arg Glu Gly Lys Phe Ser Gly Phe Leu Thr Ser Cys  
 35 40 45  
 Ser Leu Leu Leu Pro Arg Ala Ala Gln Ile Leu Ala Ala Glu Ala Gly  
 50 55 60  
 Leu Pro Ser Ser Arg Ser Phe Met Gly Phe Ala Ala Pro Phe Thr Asn

65					70					75					80
Lys	Arg	Lys	Ala	Tyr	Ser	Glu	Arg	Arg	Ile	Met	Gly	Tyr	Ser	Met	Gln
				85					90					95	
Glu	Met	Tyr	Glu	Val	Val	Ser	Asn	Val	Gln	Glu	Tyr	Arg	Glu	Phe	Val
			100					105					110		
Pro	Trp	Cys	Lys	Lys	Ser	Leu	Val	Val	Ser	Ser	Arg	Lys	Gly	His	Leu
		115					120					125			
Lys	Ala	Gln	Leu	Glu	Val	Gly	Phe	Pro	Pro	Val	Met	Glu	Arg	Tyr	Thr
	130					135					140				
Ser	Ala	Val	Ser	Met	Val	Lys	Pro	His	Met	Val	Lys	Ala	Val	Cys	Thr
145					150					155					160
Asp	Gly	Lys	Leu	Phe	Asn	His	Leu	Glu	Thr	Ile	Trp	Arg	Phe	Ser	Pro
			165					170						175	
Gly	Ile	Pro	Ala	Tyr	Pro	Arg	Thr	Cys	Thr	Val	Asp	Phe	Ser	Ile	Ser
		180						185					190		
Phe	Glu	Phe	Arg	Ser	Leu	Leu	His	Ser	Gln	Leu	Ala	Thr	Met	Phe	Phe
		195					200					205			
Asp	Glu	Val	Val	Lys	Gln	Asn	Val	Ala	Ala	Phe	Glu	Arg	Arg	Ala	Ala
	210					215					220				
Thr	Lys	Phe	Gly	Pro	Glu	Thr	Ala	Ile	Pro	Arg	Glu	Leu	Met	Phe	His
225					230					235					240
Glu	Val	His	Gln	Thr											
				245											

&lt;210&gt; 5439

&lt;211&gt; 4234

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5439

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120

atcaaagttg tgggaaaatg gaaggaagtg aagattgacc caaatatggt tgcagatgga

180

cagatggatg acttggtgtg ctttgaggaa ttgacagatt accagttggt ctcccctgcc

240

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300

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420

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480

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540

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600

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660

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720

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780  
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960  
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<210> 5440

<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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Gln	Arg	Met	Leu	Asn	Arg	Arg	Pro	Glu	Ile	Val	Val	Ala	Thr	Pro	Gly	35	40	45	
Arg	Leu	Trp	Glu	Leu	Ile	Lys	Glu	Lys	His	Tyr	His	Leu	Arg	Asn	Leu	50	55	60	
Arg	Gln	Leu	Arg	Cys	Leu	Val	Val	Asp	Glu	Ala	Asp	Arg	Met	Val	Glu	65	70	75	80
Lys	Gly	His	Phe	Ala	Glu	Leu	Ser	Gln	Leu	Leu	Glu	Met	Leu	Asn	Asp	85	90	95	
Ser	Gln	Tyr	Asn	Pro	Lys	Arg	Gln	Thr	Leu	Val	Phe	Ser	Ala	Thr	Leu	100	105	110	
Thr	Leu	Val	His	Gln	Ala	Pro	Ala	Arg	Ile	Leu	His	Lys	Lys	His	Thr	115	120	125	
Lys	Lys	Met	Asp	Lys	Thr	Ala	Lys	Leu	Asp	Leu	Leu	Met	Gln	Lys	Ile	130	135	140	
Gly	Met	Arg	Gly	Lys	Pro	Lys	Val	Ile	Asp	Leu	Thr	Arg	Asn	Glu	Ala	145	150	155	160
Thr	Val	Glu	Thr	Leu	Thr	Glu	Thr	Lys	Ile	His	Cys	Glu	Thr	Asp	Glu	165	170	175	
Lys	Asp	Phe	Tyr	Leu	Tyr	Tyr	Phe	Leu	Met	Gln	Tyr	Pro	Gly	Arg	Ser	180	185	190	
Leu	Val	Phe	Ala	Asn	Ser	Ile	Ser	Cys	Ile	Lys	Arg	Leu	Ser	Gly	Leu	195	200	205	
Leu	Lys	Val	Leu	Asp	Ile	Met	Pro	Leu	Thr	Leu	His	Ala	Cys	Met	His	210	215	220	
Gln	Lys	Gln	Arg	Leu	Arg	Asn	Leu	Glu	Gln	Phe	Ala	Arg	Leu	Glu	Asp	225	230	235	240
Cys	Val	Leu	Leu	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro	245	250	255	
Lys	Val	Gln	His	Val	Ile	His	Tyr	Gln	Val	Pro	Arg	Thr	Ser	Glu	Ile	260	265	270	
Tyr	Val	His	Arg	Ser	Gly	Arg	Thr	Ala	Arg	Ala	Thr	Asn	Glu	Gly	Leu	275	280	285	
Ser	Leu	Met	Leu	Ile	Gly	Pro	Glu	Asp	Val	Ile	Asn	Phe	Lys	Lys	Ile				

290		295		300	
Tyr Lys Thr Leu Lys Lys Asp Glu Asp Ile Pro Leu Phe Pro Val Gln					
305		310		315	320
Thr Lys Tyr Met Asp Val Val Lys Glu Arg Ile Arg Leu Ala Arg Gln					
	325		330		335
Ile Glu Lys Ser Glu Tyr Arg Asn Phe Gln Ala Cys Leu His Asn Ser					
	340		345		350
Trp Ile Glu Gln Ala Ala Ala Ala Leu Glu Ile Glu Leu Glu Glu Asp					
	355		360		365
Met Tyr Lys Gly Gly Lys Ala Asp Gln Gln Glu Glu Arg Arg Arg Gln					
	370	375		380	
Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln					
385		390		395	400
Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly					
	405		410		415
Lys Pro Pro Leu Leu Val Ser Ala Pro Ser Lys Ser Glu Ser Ala Leu					
	420		425		430
Ser Cys Leu Ser Lys Gln Lys Lys Lys Lys Thr Lys Lys Pro Lys Glu					
	435	440		445	
Pro Gln Pro Glu Gln Pro Gln Pro Ser Thr Ser Ala Asn					
450		455		460	

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 <212> DNA  
 <213> Homo sapiens

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 300  
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 420  
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 480  
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 660  
 aaaatgaaga tagaacgtgc tcacatgagg cttcggttca tccttccagt gaatgaaggc  
 720  
 aagaagctga aagaaaagct caagccactg atcaaggtca tagaaagtga agattatggc  
 780

caacagttag aaatcgtatg tctgattgac cgggctgct tccgagaaat tgatgagcta  
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 1635

&lt;210&gt; 5442

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5442

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Val	Val	Arg	Met	Lys	Arg	Ala	Gly	Lys	Arg	Phe	Glu	Ile	Ala	Cys	Tyr
			20					25					30		
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
			35				40						45		
Glu	Val	Leu	Gln	Thr	His	Ser	Val	Phe	Val	Asn	Val	Ser	Lys	Gly	Gln
			50			55				60					
Val	Ala	Lys	Lys	Glu	Asp	Leu	Ile	Ser	Ala	Phe	Gly	Thr	Asp	Asp	Gln
65					70					75				80	
Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
				85				90						95	
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
			100				105						110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
		115					120						125		
Thr	Val	Ile	Leu	Ile	Glu	Arg	Ala	Met	Lys	Asp	Ile	His	Tyr	Ser	Val



130		135		140
Lys Thr Asn Lys Ser Thr	Lys Gln Gln Ala Leu	Glu Val Ile Lys Gln		
145	150	155	160	
Leu Lys Glu Lys Met Lys	Ile Glu Arg Ala His	Met Arg Leu Arg Phe		
	165	170	175	
Ile Leu Pro Val Asn Glu	Gly Lys Lys Leu Lys	Glu Lys Leu Lys Pro		
	180	185	190	
Leu Ile Lys Val Ile Glu	Ser Glu Asp Tyr Gly	Gln Gln Leu Glu Ile		
	195	200	205	
Val Cys Leu Ile Asp Pro	Gly Cys Phe Arg Glu	Ile Asp Glu Leu Ile		
	210	215	220	
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<210> 5443  
 <211> 2021  
 <212> DNA  
 <213> Homo sapiens

<400> 5443  
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 2021

&lt;210&gt; 5444

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5444

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Leu	Asp	Met	Leu	Asn	Asn	Trp	Asp	Lys	Trp	Met	Ala	Lys	Lys	His	Lys
			20					25					30		
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
			35					40					45		
Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
			50					55					60		
Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
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<210> 5445
<211> 1187
<212> DNA
<213> Homo sapiens
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 1187

&lt;210&gt; 5446

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5446

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Glu	Ser	Lys	His	Thr	Thr	Cys	Ala	Lys	Val	Lys	Trp	Pro	Gln	Pro	Pro
			20					25					30		
Arg	Lys	Thr	Gly	Trp	Arg	Phe	Leu	Arg	Arg	Ser	Thr	His	Ser	Arg	His
		35					40					45			
Gly	Thr	Gln	Trp	Phe	His	Pro	Gln	Val	Cys	Ser	Asn	Arg	His	His	Ser
	50					55					60				
Pro	Arg	Pro	His	Ala	Asp	Ser	Asp	Thr	Arg	Ala	His	Ser	Pro	Arg	Ser

65					70					75					80
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
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Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
			100				105								

<210> 5447  
 <211> 1444  
 <212> DNA  
 <213> Homo sapiens

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 1260

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 1444

<210> 5448  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<400> 5448  
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 Ala Leu His Ser Ala Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile  
 35 40 45  
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu  
 50 55 60  
 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn  
 65 70 75 80  
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr  
 85 90 95  
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu  
 100 105 110  
 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly  
 115 120 125  
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 130 135 140  
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg  
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 Phe Pro Tyr Tyr Lys Cys Gly Ser Glu Arg Ile Leu Val  
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<210> 5449  
 <211> 1359  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 1359

&lt;210&gt; 5450

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5450

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 Glu Met Lys Glu Arg Gly Gly Asn Gln Thr Ser Gly Ile Asp Phe Phe  
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 Ile Thr Gln Glu Arg Ile Val Phe Leu Asp Thr Gln Pro Ile Leu Ser  
 35 40 45  
 Pro Ser Ile Leu Asp His Leu Ile Asn Asn Asp Arg Lys Leu Pro Pro  
 50 55 60  
 Glu Tyr Asn Leu Pro His Thr Tyr Val Glu Met Gln Ser Leu Gln Ile

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Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr	Arg	Phe	Leu	Gln	Thr	Ala	Glu	Met
		100						105					110		
Val	Lys	Pro	Ser	Thr	Pro	Ser	Pro	Ser	His	Glu	Ser	Ser	Ser	Ser	Ser
		115					120					125			
Gly	Ser	Asp	Glu	Gly	Thr	Glu	Tyr	Tyr	Pro	His	Leu	Val	Phe	Phe	Gln
		130				135					140				
Asn	Lys	Ala	Arg	Arg	Glu	Asp	Phe	Cys	Pro	Arg	Lys	Leu	Arg	Gln	Met
145					150					155				160	
His	Leu	Met	Ile	Asp	Gln	Leu	Met	Ala	His	Ser	His	Leu	Arg	Tyr	Lys
			165						170					175	
Gly	Thr	Leu	Ser	Met	Leu	Gln	Cys	Asn	Val	Phe	Pro	Gly	Leu	Pro	Pro
		180						185					190		
Asp	Phe	Leu	Asp	Ser	Glu	Val	Asn	Leu	Phe	Leu	Val	Pro	Phe	Met	Asp
		195					200					205			
Ser	Glu	Ala	Glu	Ser	Glu	Asn	Pro	Pro	Arg	Ala	Gly	Pro	Gly	Ser	Ser
		210				215					220				
Pro	Leu	Phe	Ser	Leu	Leu	Pro	Gly	Tyr	Arg	Gly	His	Pro	Ser	Phe	Gln
225					230					235				240	
Ser	Leu	Val	Ser	Lys	Leu	Arg	Ser	Gln	Val	Met	Ser	Met	Ala	Arg	Pro
			245						250				255		
Gln	Leu	Ser	His	Thr	Ile	Leu	Thr	Glu	Lys	Asn	Trp	Phe	His	Tyr	Ala
		260						265				270			
Ala	Arg	Ile	Trp	Asp	Gly	Val	Arg	Lys	Ser	Ser	Ala	Leu	Ala	Glu	Tyr
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Ser	Arg	Leu	Leu	Ala											
		290													

<210> 5451  
 <211> 1184  
 <212> DNA  
 <213> Homo sapiens

<400> 5451  
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa  
 1184

&lt;210&gt; 5452

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5452

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Arg	Lys	Gly	Ser	His	Leu	Leu	Ser	Leu	Ala	Glu	Pro	Leu	Pro	Pro	Tyr
			20					25					30		
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
		35					40					45			
Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
		50				55					60				
Ala	Pro	Gly	Met	Val	Thr	Glu	Glu	Lys	His	Ala	Val	Pro	Val	Ser	Pro
65					70				75					80	
Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85					90						95	
Arg	Ser	Leu	Lys	Leu	Pro	Gly	Leu	Val	Leu	Asp	Pro	Ser	Arg	Asn	His
		100					105						110		
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
		115				120						125			
Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
		130				135					140				
Leu	Tyr	Leu	Glu	Asp	Glu	Ala	Gln	Thr	Pro	Thr	Pro	Leu	Ser	Pro	Pro
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			165					170						175	
Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
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<210> 5453  
 <211> 1974  
 <212> DNA  
 <213> Homo sapiens

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<210> 5454  
 <211> 320  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Leu Arg Tyr Arg Phe Pro Glu Leu Ala Asp Pro Asp Thr Cys Tyr Gly  
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 65 70 75 80  
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 Glu Arg Arg Val Thr Lys Ala Tyr Leu Ala Leu Leu Arg Gly His Ile  
 100 105 110  
 Gln Glu Ser Arg Val Thr Ile Ser His Ala Ile Gly Arg Asn Ser Thr  
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 Glu Gly Arg Ala His Thr Met Cys Ile Glu Gly Ser Gln Gly Val Ala  
 130 135 140  
 Gly Cys Glu Asn Pro Lys Pro Ser Leu Thr Asp Leu Val Val Leu Glu  
 145 150 155 160  
 His Gly Leu Tyr Ala Gly Asp Pro Val Ser Lys Val Leu Leu Lys Pro  
 165 170 175  
 Leu Thr Gly Arg Thr His Gln Leu Arg Val His Cys Ser Ala Leu Gly  
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 His Pro Val Val Gly Asp Leu Thr Tyr Gly Glu Val Ser Gly Arg Glu  
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210		215		220
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225		230		235
Ser Leu Asp Ala Cys Trp	Ser Pro His Thr Leu	Leu Gln Ser Leu Asp		240
		245		250
Gln Leu Val Gln Ala Leu	Arg Ala Thr Pro Asp	Pro Asp Pro Glu Asp		255
		260		265
Arg Gly Pro Arg Pro Gly	Ser Pro Ser Ala Leu	Leu Pro Gly Pro Gly		270
		275		280
Arg Pro Pro Pro Pro Pro	Thr Lys Pro Pro Glu	Thr Glu Ala Gln Arg		285
		290		295
Gly Pro Cys Leu Gln Trp	Leu Ser Glu Trp Thr	Leu Glu Pro Asp Ser		300
305		310		315
				320

&lt;210&gt; 5455

&lt;211&gt; 975

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5455

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975

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 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 5456  
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 Leu Tyr Gly Leu Ala Ser Phe Arg Pro Gly Val Gly Pro His Pro Thr  
 35 40 45  
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr  
 50 55 60  
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala  
 65 70 75 80  
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe  
 85 90 95  
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser  
 100 105 110  
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His  
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 Ala Leu Ala Ala Ala  
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<210> 5457  
 <211> 448  
 <212> DNA  
 <213> Homo sapiens

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<210> 5458  
 <211> 81  
 <212> PRT

<213> Homo sapiens

<400> 5458

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		20						25					30		
Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His	Met	Thr	Ala
		35					40					45			
Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr	Pro	Val	Asp
	50				55					60					
Ser	Val	Lys	Val	Met	Trp	Thr	Val	Glu	Leu	Cys	Ala	Gly	His	Phe	Gln
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Pro															

<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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960

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<210> 5460  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 5460  
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 20 25 30  
 Ser Glu Asp Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His  
 35 40 45  
 Met Thr Ala Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr  
 50 55 60  
 Pro Val Asp Ser Val Lys Thr Arg Met Gln Ser Leu Ser Pro Asp Pro  
 65 70 75 80  
 Lys Ala Gln Tyr Thr Ser Ile Tyr Gly Ala Leu Lys Lys Ile Met Gln  
 85 90 95  
 Thr Glu Gly Phe Trp Arg Pro Leu Arg Gly Val Asn Val Met Ile Met  
 100 105 110  
 Gly Ala Gly Pro Ala His Ala Met Tyr Phe Ala Cys Tyr Glu Asn Met  
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<210> 5461  
 <211> 1725  
 <212> DNA  
 <213> Homo sapiens

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<210> 5462

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5462

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			20					25					30		
Leu	Gly	Ile	Cys	Tyr	Asp	Met	Arg	Phe	Ala	Glu	Leu	Ala	Gln	Ile	Tyr
		35					40					45			
Ala	Gln	Arg	Gly	Cys	Gln	Leu	Val	Tyr	Pro	Gly	Ala	Phe	Asn	Leu	
	50					55				60					
Thr	Thr	Gly	Pro	Ala	His	Trp	Glu	Leu	Leu	Gln	Arg	Ser	Arg	Ala	Val
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Asp	Asn	Gln	Val	Tyr	Val	Ala	Thr	Ala	Ser	Pro	Ala	Arg	Asp	Asp	Lys
				85					90				95		
Ala	Ser	Tyr	Val	Ala	Trp	Gly	His	Ser	Thr	Val	Val	Asn	Pro	Trp	Gly
			100					105				110			
Glu	Val	Leu	Ala	Lys	Ala	Gly	Thr	Glu	Glu	Ala	Ile	Val	Tyr	Ser	Asp
		115					120					125			
Ile	Asp	Leu	Lys	Lys	Leu	Ala	Glu	Ile	Arg	Gln	Gln	Ile	Pro	Val	Phe
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<210> 5463

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5463

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<210> 5464  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 5464  
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 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr  
 35 40 45  
 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr  
 50 55 60  
 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr  
 65 70 75 80  
 Glu Phe Leu Gln Glu Gln Val Asn Pro His Arg Thr Tyr Asn Pro Gln  
 85 90 95  
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<210> 5465  
 <211> 497  
 <212> DNA  
 <213> Homo sapiens

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497

<210> 5466

<211> 134

<212> PRT

<213> Homo sapiens

<400> 5466

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           20           25           30
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser
           35           40           45
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
           50           55           60
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
65           70           75           80
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro
           85           90           95
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro
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Gly Gln Pro Arg Ser Ala
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<210> 5467

<211> 1329

<212> DNA

<213> Homo sapiens

<400> 5467

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&lt;210&gt; 5468

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
		20					25						30		
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
		35				40						45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50				55						60				
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65					70					75					80
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
				85					90					95	
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
			100					105					110		
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
		115				120						125			
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
	130					135					140				
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
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Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

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<210> 5469
<211> 1292
<212> DNA
<213> Homo sapiens
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4645

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 1292

&lt;210&gt; 5470

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5470

Xaa	Ala	Ala	Ala	Ser	Thr	Glu	Gly	Glu	Asp	Val	Gly	Trp	Trp	Arg	Ser
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Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
			20					25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35				40						45			
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50					55					60				
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70					75					80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
			85					90						95	
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
			100					105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
		115					120					125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
	130					135					140				
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150					155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
			165					170					175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
		180						185					190		
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

195	200	205
Asp Ala Leu Lys Gln Arg	Ala Glu Gln Ser Ile Ser	Glu Glu Pro Gly
210	215	220
Trp Glu Glu Glu Glu Glu	Glu Leu Met Gly Ile Ser	Pro Ile Ser Pro
225	230	235
Lys Glu Ala Lys Val Pro	Val Ala Lys Ile Ser Thr	Phe Pro Glu Gly
245	250	255
Glu Pro Gly Pro Gln Ser	Pro Cys Glu Glu Asn Leu	Val Thr Ser Val
260	265	270
Glu Pro Pro Ala Glu Val	Thr Pro Ser Glu Ser Ser	Glu Ser Ile Ser
275	280	285
Leu Val Thr Gln Ile Ala	Asn Pro Ala Thr Ala Pro	Glu Ala Arg Val
290	295	300
Leu Pro Lys Asp Leu Ser	Gln Lys Leu Leu Glu Ala	Ser Leu Glu Glu
305	310	315
Gln Gly Leu Ala Val Asp	Val Gly Glu Thr Gly Pro	Ser Pro Pro Ile
325	330	335
His Ser Lys Pro Leu Thr	Pro Ala Gly His Thr Gly	Gly Pro Glu Pro
340	345	350
Arg Pro Pro Ala Arg Val	Glu Thr Leu Arg Glu Glu	Ala Pro Thr Asp
355	360	365
Leu Arg Val Phe Glu Leu	Asn Ser Asp Ser Gly Lys	Ser Thr Pro Ser
370	375	380
Asn Asn Gly Lys Lys Gly	Ser Ser Thr Asp Ile Ser	Glu Asp Trp Glu
385	390	395
Lys Asp Phe Asp Leu Asp	Met Thr Glu Glu Glu Val	Gln Met Ala Leu
405	410	415
Ser Lys Val Asp Ala Ser	Gly Glu Leu Lys Met	
420	425	

<210> 5471  
 <211> 534  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ttgccaggtg tggcgcacat gtgtgccctg gggcagagta cagagacaca agcttgtgtg  
 180  
 gacacgaatg tgtagctatg tgcgagtgc caccgagtgg tgagtgcagg gaccccaggc  
 240  
 cggcctgcgt cgggtgcgcag ggcatatagg ggcgtgcacg cagtcttga ggtgtgtgca  
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 360  
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 420  
 gtgggggacag ccggggacag ggctgggtgt gcgtgactcg ggtgtgccgg gaccacaga  
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<210> 5472  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 5472

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Met Leu Cys Gly Ser Arg His Thr Arg Val Thr His Thr Gln Pro Cys
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Pro Arg Leu Pro Pro His Pro His Pro Asp Lys Arg Thr Leu Trp Ser
      20           25           30
Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly
      35           40           45
Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
      50           55           60
Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
65           70           75           80
Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
      85           90           95
Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
      100          105          110
Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
      115          120          125
Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
      130          135          140
Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
145          150          155          160
Ala
  
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<210> 5473  
 <211> 691  
 <212> DNA  
 <213> Homo sapiens

<400> 5473

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120
catcttcttgg ggcctgcagg agacctgaca gatgccaaaa caaaggaaca gttgggatcc
180
aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcatg
240
gaaaaaacca agtggctgga tatcaaagga aatcatgaaa aagatggagg agctcttatt
300
actggccaag gaaagcagtc ggagcaacca tacaatttgg tttggacact ttacaacatc
360
cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt
420
gtgtggacat ctccatacac ttggtggact gatgcctgtt ttgcacactc gtcacttcca
480
gggcactttg gaacttgagg tgggagactg gaaggataat aggaggtacc ggatttttgc
540
  
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 691

<210> 5474  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 5474  
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 Ser Pro Ser Pro Gly Ile Arg Ser Ile Met Ser Ser Ala Ile Ala Tyr  
 35 40 45  
 Leu Cys Gly His Leu His Thr Leu Gly Gly Leu Met Pro Val Leu His  
 50 55 60  
 Thr Arg His Phe Gln Gly Thr Leu Glu Leu Glu Val Gly Asp Trp Lys  
 65 70 75 80  
 Asp Asn Arg Arg Tyr Arg Ile Phe Ala Phe Asp His Asp Leu Phe Ser  
 85 90 95  
 Phe Ala Asp Leu Ile Phe Gly Lys Trp Pro Val Val Leu Ile Thr Asn  
 100 105 110  
 Pro Lys Ser Leu Leu Tyr Ser Cys Gly Glu His Glu Pro Leu Glu Arg  
 115 120 125  
 Leu Leu His Ser Thr His Ile Arg Leu Val Thr  
 130 135

<210> 5475  
 <211> 628  
 <212> DNA  
 <213> Homo sapiens

<400> 5475  
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 120  
 aacaaccccc acgccagcta cagcgccctt ccgccagtga gctcctccga cagcgaggcc  
 180  
 cccgaggcca accccgccga cggcagtgac gctgacgagg acgatgagga cgggggggtc  
 240  
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac  
 300  
 tcagacaaga gtagcgacaa cagtggcctg aagaggaaga cgcttgcgct aaagatgtcg  
 360  
 gtctcgaaac gagcccgaaa ggcctccagc gacctggatc aggccagcgt gtcccatcc  
 420  
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 480

cctgagaaga aagcagcggc cccggcgcca cggagggggcc ctctgggggg acggaaaaaa  
 540  
 aagaaggcgc cgtcagcctc cgactccgac tccaaggccg attcggacgg ggccaagcct  
 600  
 gagccggtgg ccatggcgcg gtcggcgt  
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<210> 5476  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 5476  
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 Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe  
           20                  25                  30  
 Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser  
           35                  40                  45  
 Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn  
       50                  55                  60  
 Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val  
 65                  70                  75                  80  
 Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu  
           85                  90                  95  
 Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg  
           100                  105                  110  
 Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala  
           115                  120                  125  
 Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn  
       130                  135                  140  
 Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr  
 145                  150                  155                  160  
 Pro Glu Lys Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly  
           165                  170                  175  
 Gly Arg Lys Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys  
           180                  185                  190  
 Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser  
       195                  200                  205  
 Ala

<210> 5477  
 <211> 727  
 <212> DNA  
 <213> Homo sapiens

<400> 5477  
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 180

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 360  
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 420  
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 480  
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 540  
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 ggtccttcgt cgagggagtc ttcagtatcc actttgaccc cctcgcatth caccgggctgc  
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 720  
 gcggccg  
 727

<210> 5478  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 5478  
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 20 25 30  
 Ala Pro Gly Gln Arg Gly Arg Lys Arg Trp Leu Leu Val Arg Leu Tyr  
 35 40 45  
 Lys Thr Trp Pro Leu Thr Cys Arg Pro Pro Thr Gln Leu Ala Gly Trp  
 50 55 60  
 Ala Gly Leu Ser Pro Leu Ala Ser Pro Gly Pro Leu Ala Gly Ser Ser  
 65 70 75 80  
 Thr Ser Leu Ser Ala Leu Ser Ala Arg Pro Pro Pro Asp Ser Ser Ser  
 85 90 95  
 Leu Ser Pro

<210> 5479  
 <211> 1386  
 <212> DNA  
 <213> Homo sapiens

<400> 5479  
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 atgcgagagg agcagctggc acgggaggcc gaggccccgg cggagcggga ggcggaggcc  
 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag  
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 1380  
 aaaaaa  
 1386

&lt;210&gt; 5480

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5480

Ala	Gly	Thr	Thr	Asp	Arg	Glu	Glu	Ala	Thr	Arg	Leu	Leu	Ala	Glu	Lys
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Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Gln	Glu	Gln	Arg	Arg
		20					25					30			
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

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 50 55 60  
 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu  
 65 70 75 80  
 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu  
 85 90 95  
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu  
 100 105 110  
 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg  
 115 120 125  
 Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys  
 130 135 140  
 Glu Ala Asn Ala Asn Gly Ser Ser Pro Glu Pro Val Lys Ala Val Glu  
 145 150 155 160  
 Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro  
 165 170 175  
 Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala  
 180 185 190  
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly  
 195 200 205  
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro  
 210 215 220  
 Glu Thr Leu Leu Pro Phe Ala Glu Ala Glu Ala Phe Leu Lys Lys Ala  
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<210> 5481  
 <211> 1513  
 <212> DNA  
 <213> Homo sapiens

<400> 5481  
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 180  
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 240  
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 300  
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 360  
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 420  
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 480  
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<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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		20					25					30			
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp	
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	50				55					60					
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65					70				75					80	
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				85					90					95	
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
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145						150						155					
Lys	Ala	Ile	Glu	Pro	Asn	Asp	Tyr	Thr	Gly	Lys	Val	Ser	Glu	Glu	Ile		
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<211> 1552
<212> DNA
<213> Homo sapiens
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 <212> PRT  
 <213> Homo sapiens

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 65 70 75 80  
 Arg Thr Pro Ile Ile Ala Gly Gly Leu Phe Val Ile Asp Lys Ala Trp  
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 Phe Asp Tyr Leu Gly Lys Tyr Asp Met Asp Met Asp Ile Trp Gly Gly  
 100 105 110  
 Glu Asn Phe Glu Ile Ser Phe Arg Val Trp Met Cys Gly Gly Ser Leu  
 115 120 125  
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 Lys Arg Thr Ala Glu Val Trp Met Asp Glu Tyr Lys Gln Tyr Tyr Tyr  
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 180 185 190  
 Arg Leu Asp Leu Arg Lys Asn Leu Arg Cys Gln Ser Phe Lys Trp Tyr  
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 210 215 220  
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	290					295					300						
Gln	Gln	Trp	Thr	Lys	Thr	Gly	Ser	His	Ile	Glu	His	Ile	Ala	Ser	His		
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Leu	Cys	Leu	Asp	Thr	Asp	Met	Phe	Gly	Asp	Gly	Thr	Glu	Asn	Gly	Lys		
			325						330					335			
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&lt;211&gt; 1549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5485

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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	50					55					60				
Arg	Ser	Arg	Arg	Arg	His	Gln	Arg	Lys	Tyr	Arg	Arg	Tyr	Ser	Arg	Ser
65					70				75					80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90						95	
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
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Arg	Ala	Tyr	Ala	Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg
	130					135						140			
Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
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			180					185					190		
Thr	Asn	Ile	Asp	Leu	Pro	Ala	Ser	Leu	Arg	Thr	Val	Pro	Ser	Ala	Lys
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Glu	Thr	Ser	Arg	Gly	Ile	Gly	Val	Ser	Ser	Asn	Gly	Ala	Lys	Pro	Glu
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225	230								235					240		
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<212> DNA
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<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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			20					25					30		
Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met	Gly	Ala
		35					40					45			
Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met	Lys	Arg
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Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
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Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu	Leu	His	Asp	Ala	Val	Met	Asn
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Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
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Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr	Val	Trp	Arg	Thr	Glu	Gly	Leu
	115					120						125			
Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Ile	Pro
	130					135						140			
Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	Gln	Val
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Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln	Ser	His	Ile	Ile	Ser	Gly	Gly
				165					170					175	
Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
			180					185					190		
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
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Ile	Ser	Gly	Arg	Leu	Ser	Gly	Met	Ala	Asn	Ala	Phe	Arg	Thr	Val	Tyr

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Ile Tyr Gln Met Pro Ser Thr Ala Ile Ser Trp Ser Val Tyr Glu Phe		
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Phe Lys Tyr Phe Leu Thr Lys Arg Gln Leu Glu Asn Arg Ala Pro Tyr		
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&lt;210&gt; 5494

&lt;211&gt; 1278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5494

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														Cys



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&lt;210&gt; 5495

&lt;211&gt; 2414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5495

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2040

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<210> 5496
<211> 345
<212> PRT
<213> Homo sapiens
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Met	Phe	Ile	Pro	Asn	Ser	Gln	Trp	Thr	Glu	Val	Ser	Trp	Phe	Leu	Gly
			20					25					30		
Leu	Leu	Gly	Ser	Met	Ala	Leu	Ser	Asn	His	Tyr	Arg	Ser	Glu	Asp	Leu
		35					40					45			
Leu	Asp	Val	Asp	Thr	Ala	Ala	Gly	Gly	Phe	Gln	Gln	Arg	Gln	Gly	Leu
	50					55					60				
Lys	Tyr	Cys	Leu	Pro	Leu	Thr	Phe	Cys	Ile	His	Thr	Gly	Leu	Ser	Gln
65					70					75					80
Tyr	Ile	Ala	Val	Glu	Ala	Ala	Glu	Gly	Arg	Asn	Lys	Asn	Glu	Val	Phe
				85					90					95	
Tyr	Gln	Cys	Pro	Asp	Gln	Met	Ala	Arg	Asn	Pro	Ala	Ala	Ile	Asp	Met
			100					105					110		
Phe	Ile	Ile	Gly	Ala	Thr	Phe	Thr	Asp	Trp	Phe	Thr	Ser	Tyr	Val	Lys
		115					120					125			
Asn	Val	Val	Ser	Gly	Gly	Phe	Pro	Ile	Ile	Arg	Asp	Gln	Ile	Phe	Arg
	130					135					140				
Tyr	Val	His	Asp	Pro	Glu	Cys	Val	Ala	Thr	Thr	Gly	Asp	Ile	Thr	Val
145					150					155					160
Ser	Val	Ser	Thr	Ser	Phe	Leu	Pro	Glu	Leu	Ser	Ser	Val	His	Pro	Pro
				165					170					175	
His	Tyr	Phe	Phe	Thr	Tyr	Arg	Ile	Arg	Ile	Glu	Met	Ser	Lys	Asp	Ala
			180					185					190		
Leu	Pro	Glu	Lys	Ala	Cys	Gln	Leu	Asp	Ser	Arg	Tyr	Trp	Arg	Ile	Thr
		195				200						205			
Asn	Ala	Lys	Gly	Asp	Val	Glu	Glu	Val	Gln	Gly	Pro	Gly	Val	Val	Gly
	210					215					220				
Glu	Phe	Pro	Ile	Ile	Ser	Pro	Gly	Arg	Val	Tyr	Glu	Tyr	Thr	Ser	Cys
225					230					235					240
Thr	Thr	Phe	Ser	Thr	Thr	Ser	Gly	Tyr	Met	Glu	Gly	Tyr	Tyr	Thr	Phe
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<210> 5497
<211> 1056
<212> DNA
<213> Homo sapiens
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4678

<210> 5498  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

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 His Pro Pro Ala Phe Ala Pro Arg Thr Leu Arg Met Ala Gln Leu Val  
           20                  25                  30  
 Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr  
           35                  40                  45  
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys  
   50                  55                  60  
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met  
 65                  70                  75                  80  
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg  
                   85                  90                  95  
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser  
           100                  105                  110  
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp  
           115                  120                  125  
 Pro Ser Ala Gly Ala Ser Glu Lys Ser Arg Asn Pro Ser Arg Met Gly  
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 Thr Trp Gly Val Asn Phe  
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<210> 5499  
 <211> 1918  
 <212> DNA  
 <213> Homo sapiens

<400> 5499  
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 240  
 gagggacaca cggacaaaca acagacagaa gacgtactgg ccgctggact ccgctgcctc  
 300  
 ccccatctcc ccgcatctg cgcccgagg atgagcccag ccttcagggc catggatgtg  
 360  
 gagccccgcg ccaaaggcgt ccttctggag ccctttgtcc accaggtcgg ggggcactca  
 420  
 tgcgtgctcc gcttcaatga gacaaccctg tgcaagcccc tgggtcccaag ggaacatcag  
 480  
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 540  
 tctgtgcgct ttgaagaaga tgaagacagg aacttgtgtc taatagcata tccattgaaa  
 600

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 ctaagggtgga caacaaacaa aaaacatcat gtcttagaaa cagaaaagac ccctaaggac  
 720  
 tgggtgcgtc agcaccgtaa agaggagaaa atgaagagcc ataagttaga agaagaattt  
 780  
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 840  
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 900  
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 960  
 tcccgcctatg aggtgccttg tgtccttgac ctcaagatgg gcacacgaca acatgggtgat  
 1020  
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 gtcattggtg tgnctgtgtg tggcatgcag gtgtaccaag caggcagtgg gcagctcatg  
 1140  
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 1200  
 cagttcttcc acaatgggcg gtacctgcgc cgtgaactcc tgggcctgt gctcaagaag  
 1260  
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 1800  
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 1918

&lt;210&gt; 5500

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5500

Met	Ser	Pro	Ala	Phe	Arg	Ala	Met	Asp	Val	Glu	Pro	Arg	Ala	Lys	Gly
1				5				10						15	
Val	Leu	Leu	Glu	Pro	Phe	Val	His	Gln	Val	Gly	Gly	His	Ser	Cys	Val



20							25					30			
Leu	Arg	Phe	Asn	Glu	Thr	Thr	Leu	Cys	Lys	Pro	Leu	Val	Pro	Arg	Glu
		35						40				45			
His	Gln	Phe	Tyr	Glu	Thr	Leu	Pro	Ala	Glu	Met	Arg	Lys	Phe	Thr	Pro
	50					55					60				
Gln	Tyr	Lys	Gly	Val	Val	Ser	Val	Arg	Phe	Glu	Glu	Asp	Glu	Asp	Arg
65					70					75					80
Asn	Leu	Cys	Leu	Ile	Ala	Tyr	Pro	Leu	Lys	Gly	Asp	His	Gly	Ile	Val
				85					90					95	
Asp	Ile	Ala	His	Asn	Ser	Asp	Cys	Glu	Pro	Lys	Ser	Lys	Leu	Leu	Arg
			100					105					110		
Trp	Thr	Thr	Asn	Lys	Lys	His	His	Val	Leu	Glu	Thr	Glu	Lys	Thr	Pro
		115						120				125			
Lys	Asp	Trp	Val	Arg	Gln	His	Arg	Lys	Glu	Glu	Lys	Met	Lys	Ser	His
	130					135					140				
Lys	Leu	Glu	Glu	Glu	Phe	Glu	Trp	Leu	Lys	Lys	Ser	Glu	Val	Leu	Tyr
145					150					155					160
Tyr	Thr	Val	Glu	Lys	Lys	Gly	Asn	Ile	Ser	Ser	Gln	Leu	Lys	His	Tyr
				165					170					175	
Asn	Pro	Trp	Ser	Met	Lys	Cys	His	Gln	Gln	Gln	Leu	Gln	Arg	Met	Lys
			180					185					190		
Glu	Asn	Ala	Lys	His	Arg	Asn	Gln	Tyr	Lys	Phe	Ile	Leu	Leu	Glu	Asn
	195							200				205			
Leu	Thr	Ser	Arg	Tyr	Glu	Val	Pro	Cys	Val	Leu	Asp	Leu	Lys	Met	Gly
	210					215					220				
Thr	Arg	Gln	His	Gly	Asp	Asp	Ala	Ser	Glu	Glu	Lys	Ala	Ala	Asn	Gln
225					230					235					240
Ile	Arg	Lys	Cys	Gln	Gln	Ser	Thr	Ser	Ala	Val	Ile	Gly	Val	Xaa	Val
				245					250					255	
Cys	Gly	Met	Gln	Val	Tyr	Gln	Ala	Gly	Ser	Gly	Gln	Leu	Met	Phe	Met
			260					265					270		
Asn	Lys	Tyr	His	Gly	Arg	Lys	Leu	Ser	Val	Gln	Gly	Phe	Lys	Glu	Ala
	275							280				285			
Leu	Phe	Gln	Phe	Phe	His	Asn	Gly	Arg	Tyr	Leu	Arg	Arg	Glu	Leu	Leu
	290					295					300				
Gly	Pro	Val	Leu	Lys	Lys	Leu	Thr	Glu	Leu	Lys	Ala	Val	Leu	Glu	Arg
305					310					315					320
Gln	Glu	Ser	Tyr	Arg	Phe	Tyr	Ser	Ser	Ser	Leu	Leu	Val	Ile	Tyr	Asp
				325					330					335	
Gly	Lys	Glu	Arg	Pro	Glu	Val	Val	Leu	Asp	Ser	Asp	Ala	Glu	Asp	Leu
			340					345					350		
Glu	Asp	Leu	Ser	Glu	Glu	Ser	Ala	Asp	Glu	Ser	Ala	Gly	Ala	Tyr	Ala
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<210> 5501

<211> 568

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5501

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 120  
 tgaagcgggg acaaaaccat gcagctcaga ggtccctgtg ggggctgggg gagctgcctt  
 180  
 gcaggtcttg gcacatgcac agcaggctcc ccatagcttt gtcaccacaa agggcactgt  
 240  
 tctattcaca gcacctctg cttctgcctg gcaactgtgt ctccctgtgc tatatttaat  
 300  
 tccaccagca aagctggcga ggcaggggccc agccctgaag gagatctcct tgcctgaccc  
 360  
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 420  
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 480  
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 568

&lt;210&gt; 5502

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5502

Met	Ile	Leu	Gly	Lys	Arg	Leu	His	Leu	Asn	Phe	Arg	Tyr	Phe	Thr	Cys
1				5					10					15	
Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
		35					40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50					55					60				
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65					70					75					80
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85						90					95	
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
			100					105					110		

&lt;210&gt; 5503

&lt;211&gt; 1679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5503

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120  
atttaatcct cacaatagtc aagctaggaa ggtaagtgtg gaattattac cccatttgat  
180  
aggtagacaa attaaagctt aagatcaaac cgtttgcaaa gcaggaagca gcacttcctc  
240  
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300  
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360  
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420  
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480  
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1200  
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1560  
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1679

<210> 5504  
 <211> 392  
 <212> PRT  
 <213> Homo sapiens

<400> 5504

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Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
      35           40           45
Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
      50           55           60
Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
      65           70           75           80
Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
      85           90           95
Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
      100          105          110
Ala Met Gly Leu Ala Pro Thr Ser Pro Gly Ala Pro Asn Ser Ala
      115          120          125
Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
      130          135          140
His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
      145          150          155          160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
      165          170          175
Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
      180          185          190
Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
      195          200          205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
      210          215          220
Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
      225          230          235          240
Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
      245          250          255
Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
      260          265          270
Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
      275          280          285
Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
      290          295          300
Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
      305          310          315          320
Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
      325          330          335
Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
      340          345          350
Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
      355          360          365
Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

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370 375 380  
 Pro Cys Gly Ser Trp Gly Thr Arg  
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<210> 5505  
 <211> 1099  
 <212> DNA  
 <213> Homo sapiens

<400> 5505  
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 180  
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 240  
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 300  
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 360  
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 480  
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 720  
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 780  
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 840  
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 900  
 gggctgggct tgggaagggg aggtggaggc cagggtgtcc cagacctcta acccttgccc  
 960  
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 1020  
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 1080  
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 1099

<210> 5506  
 <211> 280  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 5506

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 20 25 30  
 Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr His Val Pro Ala  
 35 40 45  
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp  
 50 55 60  
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly  
 65 70 75 80  
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe  
 85 90 95  
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala  
 100 105 110  
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu  
 115 120 125  
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn  
 130 135 140  
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys  
 145 150 155 160  
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu  
 165 170 175  
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg  
 180 185 190  
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala  
 195 200 205  
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln  
 210 215 220  
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn  
 225 230 235 240  
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp  
 245 250 255  
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser  
 260 265 270  
 Ile Thr Ile Gly Pro Pro Leu Pro  
 275 280

&lt;210&gt; 5507

&lt;211&gt; 1658

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5507

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1658

&lt;210&gt; 5508

&lt;211&gt; 448

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5508

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Tyr	Val	Asp	Arg	Asp	Met	Phe	Phe	Lys	Ile	Cys	Glu	Ser	Leu	Asn	Val
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Pro	Val	Asp	Asp	Ser	Leu	Val	Lys	Glu	Leu	Ile	Arg	Met	Cys	Ser	His
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435

440

445

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 <211> 818  
 <212> DNA  
 <213> Homo sapiens

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<210> 5510  
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 <212> PRT  
 <213> Homo sapiens

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 Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly  
 35 40 45  
 Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro  
 50 55 60  
 Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys  
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 Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro



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&lt;210&gt; 5514

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5514

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Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
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Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
			85					90					95		
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
		100					105					110			
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
		115					120				125				
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
	130					135				140					
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145					150				155					160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
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<210> 5515  
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 <212> DNA  
 <213> Homo sapiens

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<210> 5516  
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 <212> PRT  
 <213> Homo sapiens

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Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Ala Leu Glu
35     40     45
Gln Glu His Lys Lys Leu Ala Arg Leu Glu Glu Arg Gly Lys
50     55     60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65     70     75     80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85     90     95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100    105    110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517  
 <211> 804  
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 <213> Homo sapiens

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<210> 5518  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 5518  
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 Ile Val Val Gly Ser Ser Asp Arg Ile Arg Ala Ser Ser Leu Gln Val  
 35 40 45  
 Gln Lys Gln Phe Lys Thr Leu Met Ile Ala Leu Gln Gln Pro Thr His  
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85

<210> 5519  
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 <212> DNA  
 <213> Homo sapiens

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<210> 5521  
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<211> 441

<212> PRT

<213> Homo sapiens

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<211> 6190
<212> DNA
<213> Homo sapiens
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&lt;211&gt; 761

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5525

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&lt;210&gt; 5526

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5526

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Glu	Ile	Thr	Gln	Leu	Glu	Ser	Trp	Glu	Glu	Pro	Phe	Met	Pro	Ala	Trp
	50					55					60				
Glu	Val	Val	Thr	Ser	Ala	Ile	Pro	Arg	Glu	Thr	Leu	Arg	Met	Ala	Phe
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Met	Arg	Glu	Leu	Ala	Ile	Glu	His	His	Ser	Ser	Lys	Tyr	Ala	His	Trp
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Arg	Gln	Asp	Glu	Asn	Ser										
			100												

&lt;210&gt; 5527

&lt;211&gt; 728

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5527

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<210> 5528

<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

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				85					90					95	
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Gln	Glu	Ala	Met	Ala	Lys	Met	Ser	Lys	Val	Gly	Lys	Val	Val	Phe	Pro
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Arg	Leu	Gln	Asp	Lys	Lys	Tyr	Tyr	Asp	Lys	Lys	Tyr	Gln	Val	Phe	Leu
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<211> 2602

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 5530

&lt;211&gt; 603

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5530

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Leu	Asn	Leu	Cys	Ala	Arg	Arg	Arg	Thr	Arg	Val	Gln	Arg	Pro	Ile	Val
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Glu	Gln	Pro	Ser	Gly	Ser	Val	Glu	Thr	Gly	Phe	Glu	Asp	Lys	Ile	Pro
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Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln
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Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe
			100					105					110		
Leu	Lys	Tyr	Leu	Ser	Gln	Phe	Gly	Pro	Ile	Asn	Asn	His	Phe	Phe	Tyr
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Glu	Ser	Phe	Gly	Leu	Tyr	Ala	Val	Val	Glu	Phe	Cys	Gln	Lys	Glu	Ser
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Ile	Gly	Ser	Leu	Gln	Asn	Gly	Thr	His	Thr	Pro	Ser	Thr	Ala	Met	Glu

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Thr Lys Leu Arg Tyr Leu Thr Cys Ser Leu Ile Glu Asp Met Ala Ala
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Gln Ser Gln Leu Gln Lys Phe Val Asp Leu Ala Arg Glu Ser Ala Trp
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Pro Trp Gly Leu Val Ser Leu Leu Leu Pro Ser Ala Pro Asn Arg Lys
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<211> 593

<212> PRT

<213> Homo sapiens

<400> 5532

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 <212> PRT  
 <213> Homo sapiens

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 Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val Gly Leu Arg Gln Lys  
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 <213> Homo sapiens

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&lt;210&gt; 5536

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5536

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Pro Gly Glu Thr Pro Lys His Gln Pro Gly Ser Pro Arg Gly Ser Gly
          35          40          45
Arg Glu Glu Asp Asp Glu Leu Leu Gly Asn Asp Asp Ser Asp Lys Thr
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Glu Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu
65          70          75          80
Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
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Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
          100          105          110
Tyr Ile Arg Ser Asn Pro Asp Leu Tyr Gly Pro Phe Trp Ile Cys Ala
          115          120          125
Thr Leu Val Phe Ala Ile Ala Ile Ser Gly Asn Leu Ser Asn Phe Leu
          130          135          140
Ile His Leu Gly Glu Lys Thr Tyr His Tyr Val Pro Glu Phe Arg Lys
145          150          155          160
Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
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Leu Ala Leu Trp Gly Phe Leu Met Trp Arg Asn Ser Lys Val Met Asn
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Leu Phe Ile Tyr Ile Pro Thr Ala Ile Leu Trp Ile Ile Pro Gln Lys
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Ala Val Arg Trp Ile Leu Val Met Ile Ala Leu Gly Ile Ser Gly Ser
225          230          235          240
Leu Leu Ala Met Thr Phe Trp Pro Ala Val Arg Glu Asp Asn Arg Arg
          245          250          255
Val Ala Leu Ala Thr Ile Val Thr Ile Val Leu Leu His Met Leu Leu
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Ser Val Gly Cys Leu Ala Tyr Phe Phe Asp Ala Pro Glu Met Asp His
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Leu Pro Thr Thr Thr Ala Thr Pro Asn Gln Thr Val Ala Ala Ala Lys
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Ser Ser
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&lt;210&gt; 5537

&lt;211&gt; 2881

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5537

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&lt;210&gt; 5538

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5538

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 Ala Glu Leu Arg His Leu Asp Thr Gln Val Gln Arg Cys Glu Asp Ile  
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Glu	Arg	Pro	Leu	Leu	Ile
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Phe	Leu	Val	Thr	Asp	Trp
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Ser	Tyr	Ile	Arg	Phe	Ser
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Asn	Ser	Val	His	Leu	Cys
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Ser	Cys	His	Arg	His	Pro
		180		185	
Gln	Arg	Phe	Gln	Ala	His
		195		200	
Ser	Thr	Ile	Ile	Val	Pro
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Gln	Thr	Ser	Gln	Asp	Thr
225		230		235	
Tyr	Gly	Ala	Asp	Phe	Val
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Glu	Ile	Asn	Ala	Ser	Pro
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Arg	Leu	Cys	Ala	Gly	Val
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Arg	Arg	Leu	Asp	Arg	Asn
		290		295	
Lys	Gln	Pro	Val	Thr	Thr
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Leu	Leu	Pro	Met	Tyr	Ser
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Thr	Ala	Ser	Trp	Trp	Ala
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&lt;210&gt; 5539

&lt;211&gt; 1887

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5539

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1887



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 <211> 378  
 <212> PRT  
 <213> Homo sapiens

<400> 5540  
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 35 40 45  
 Ala Pro Trp Cys Ser Val Ser Ser Gly Pro Ser Arg Tyr Val Leu Gly  
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 His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg  
 85 90 95  
 Leu Ala Ser Gly Ser Phe Asp Lys Thr Ala Ser Val Phe Leu Leu Glu  
 100 105 110  
 Arg Thr Gly Trp Ser Lys Lys Thr Ile Ile Gly Asp Met Gly Ile Xaa  
 115 120 125  
 Val Asp Gln Leu Cys Trp His Pro Ser Asn Pro Asp Leu Phe Val Thr  
 130 135 140  
 Ala Ser Gly Asp Lys Thr Ile Arg Ile Trp Asp Val Arg Thr Thr Lys  
 145 150 155 160  
 Cys Ile Ala Thr Val Asn Thr Lys Gly Glu Asn Ile Asn Ile Cys Trp  
 165 170 175  
 Ser Pro Asp Gly Gln Thr Ile Ala Val Gly Asn Lys Asp Asp Val Val  
 180 185 190  
 Thr Phe Ile Asp Ala Lys Thr His Arg Ser Lys Ala Glu Glu Gln Phe  
 195 200 205  
 Lys Phe Glu Val Asn Glu Ile Ser Trp Asn Asn Asp Asn Asn Met Phe  
 210 215 220  
 Phe Leu Thr Asn Gly Asn Gly Cys Ile Asn Ile Leu Ser Tyr Pro Glu  
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 260 265 270  
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 275 280 285  
 Phe Ser Arg Leu Asp Trp Pro Val Arg Thr Leu Ser Phe Ser His Asp  
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 Gly Lys Met Leu Ala Ser Ala Ser Glu Asp His Phe Ile Asp Ile Ala  
 305 310 315 320  
 Glu Val Glu Thr Gly Asp Lys Leu Trp Glu Val Gln Cys Glu Ser Pro  
 325 330 335  
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370

375

<210> 5541  
<211> 1854  
<212> DNA  
<213> Homo sapiens

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<210> 5542

<211> 315

<212> PRT

<213> Homo sapiens

<400> 5542

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&lt;210&gt; 5543

&lt;211&gt; 4021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5543

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&lt;210&gt; 5544

&lt;211&gt; 1141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5544

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Gln	Glu	Leu	Leu	Ala	Leu	Lys	Gln	Gln	Gln	Gln	Leu	Gln	Lys	Gln	Leu								
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 Pro Gly His His Ala Glu Glu Ser Thr Ala Met Gly Phe Cys Phe Phe  
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&lt;210&gt; 5545

&lt;211&gt; 1932

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5545

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&lt;210&gt; 5546

<211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 5546

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Gln Met Ser Glu Arg Phe Leu His His Thr Arg Thr Leu Val Glu Met
65           70           75           80
Lys Arg Asp Leu Asp Ser Ile Phe Arg Arg Ile Arg Thr Leu Lys Gly
          85           90           95
Lys Leu Ala Arg Gln His Pro Glu Ala Phe Ser His Ile Pro Glu Ala
          100          105          110
Ser Phe Leu Glu Glu Glu Asp Glu Asp Pro Ile Pro Pro Ser Thr Thr
          115          120          125
Thr Thr Ile Ala Thr Ser Glu Gln Ser Thr Gly Ser Cys Asp Thr Ser
          130          135          140
Pro Asp Thr Val Ser Pro Ser Leu Ser Pro Gly Phe Glu Asp Leu Ser
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His Val Gln Pro Gly Ser Pro Ala Ile Asn Gly Arg Ser Gln Thr Asp
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<210> 5547  
 <211> 1391  
 <212> DNA  
 <213> Homo sapiens

<400> 5547

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540

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&lt;210&gt; 5548

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5548

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			20					25					30		
Leu	Gln	Thr	Asn	Val	Arg	Ser	Gln	Ile	Leu	Arg	Leu	Arg	His	Thr	Ala
		35					40					45			
Phe	Val	Ile	Pro	Lys	Lys	Asn	Val	Pro	Thr	Ser	Lys	Arg	Glu	Thr	Tyr
	50					55					60				
Thr	Glu	Asp	Phe	Ile	Lys	Lys	Gln	Ile	Glu	Glu	Phe	Asn	Ile	Gly	Lys
65					70				75					80	
Arg	His	Leu	Ala	Asn	Met	Met	Gly	Glu	Asp	Pro	Glu	Thr	Phe	Thr	Gln
				85				90					95		
Glu	Asp	Ile	Asp	Arg	Ala	Ile	Ala	Tyr	Leu	Phe	Pro	Ser	Gly	Leu	Phe
			100				105						110		
Glu	Lys	Arg	Ala	Arg	Pro	Val	Met	Lys	His	Pro	Glu	Gln	Ile	Phe	Pro
		115					120					125			
Arg	Gln	Arg	Ala	Ile	Gln	Trp	Gly	Glu	Asp	Gly	Arg	Pro	Phe	His	Tyr

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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5550

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5550

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Leu	Gly	Val	Arg	Arg	Ala	Val	Leu	Gln	Leu	Pro	Gly	Leu	Thr	Gln	Val
			20					25					30		
Arg	Trp	Ser	Arg	Tyr	Ser	Pro	Glu	Phe	Lys	Asp	Pro	Leu	Ile	Asp	Lys
		35					40					45			
Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr
	50				55					60					
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly
65					70					75				80	
Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn
			85					90						95	
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile
			100					105					110		
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
		115					120					125			
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile
		130				135					140				
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
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Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp
			165					170					175		
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg
			180					185					190		
Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys

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210		215		220		
Asp	Leu His Lys Met Ala Glu Ala Asn Arg Ala	Leu Ala His Tyr Arg				
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Trp	Trp					

<210> 5551  
 <211> 1689  
 <212> DNA  
 <213> Homo sapiens

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 1680  
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 1689

<210> 5552  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 5552  
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 Tyr Leu Leu Asp Pro Tyr Val Asn Leu Ala Pro Gly Cys Arg Ser Leu  
 35 40 45  
 Phe Ser Val Ile Val Arg Val Val Gly Asp Leu Met Leu Arg Ile Gln  
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 Arg Ile Gln Asp Phe Thr Pro Lys Leu Leu Leu Val Arg Lys Arg Leu  
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 Ala Leu Thr Val Ser Ser Ile Cys  
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<210> 5553  
 <211> 274  
 <212> DNA  
 <213> Homo sapiens

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 180  
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274

<210> 5554  
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<212> PRT  
<213> Homo sapiens

<400> 5554  
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Phe Leu Ala Ile Ser Glu Glu Val Ala Phe Val Pro Glu Lys Arg Thr  
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Pro Gln Pro His Pro Thr Ala Ser Pro Asp Pro Lys Val Arg Ile Thr  
35 40 45  
Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys  
50 55 60  
Tyr Phe Pro Ser Gln Cys Pro Trp Gln Pro Trp Lys Pro Met Lys Gln  
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<210> 5555  
<211> 414  
<212> DNA  
<213> Homo sapiens

<400> 5555  
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<210> 5556  
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<212> PRT  
<213> Homo sapiens

<400> 5556  
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Glu Ser Gln Gly Cys Asp Ser Arg Arg Asp Ser Cys Glu Gly Pro Gly

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 1860  
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 1970

&lt;210&gt; 5558

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5558

Met	Asp	Asp	Phe	Thr	Pro	Pro	Gly	Ser	Gly	Ala	Cys	Lys	Phe	Ile	Gly
1				5					10					15	
Ser	Leu	His	Ser	Tyr	Ser	Phe	Ser	Ser	Lys	His	Thr	Arg	Glu	Arg	Pro
			20					25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
		35					40					45			
Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
	50					55					60				
Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65				70					75					80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
			85					90					95		
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
		100					105					110			
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
	115					120					125				
His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

130		135		140
Leu Arg Glu Gln Val	Glu Lys Lys Asn Gly	Glu Leu Lys Ser Leu Arg		
145	150	155	160	
Gln Arg Val Ser Arg	Ser Asp Ser Gln Val Arg	Lys Leu Gln Glu Lys		
	165	170	175	
Leu Asp Glu Leu Arg	Arg Val Ser Val Pro Tyr	Pro Ser Ser Leu Leu		
	180	185	190	
Ser Pro Ser Arg Glu	Pro Pro Lys Met Asn Pro	Val Val Glu Pro Leu		
	195	200	205	
Ser Trp Met Leu Gly	Thr Trp Leu Ser Asp	Pro Pro Gly Ala Gly Thr		
	210	215	220	
Tyr Pro Thr Leu Gln	Pro Phe Gln Tyr Leu Glu	Glu Val His Ile Ser		
225	230	235	240	
His Val Gly Gln Pro	Met Leu Asn Phe Ser Phe	Asn Ser Phe His Pro		
	245	250	255	
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Gln Ile Thr Arg Lys	Phe Arg Leu Asn Ser Glu	Gly Lys Leu Glu Gln		
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&lt;210&gt; 5559

&lt;211&gt; 3866

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5559

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 <213> Homo sapiens

<400> 5560  
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 50 55 60  
 Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg  
 65 70 75 80  
 Asn Ile Ala Thr Tyr Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly  
 85 90 95  
 His Asp Asp Gln Leu Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser  
 100 105 110  
 Ile Thr Asp Leu Val Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp  
 115 120 125  
 Trp Ile Ala Tyr Ile Ser Arg Glu Ile Leu Arg Gly Leu Ala His Leu  
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 His Ile His His Val Ile His Arg Asp Ile Lys Gly Gln Asn Val Leu  
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 195 200 205  
 Thr Tyr Asp Tyr Arg Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile  
 210 215 220  
 Glu Met Ala Glu Gly Ala Pro Pro Leu Cys Asp Met His Pro Met Arg  
 225 230 235 240  
 Ala Leu Phe Leu Ile Pro Arg Asn Pro Pro Pro Arg Leu Lys Ser Lys  
 245 250 255  
 Lys Trp Ser Lys Lys Phe Ile Asp Phe Ile Asp Thr Cys Leu Ile Lys  
 260 265 270  
 Thr Tyr Met Gln Arg Pro Thr Thr Glu Gln Leu Leu Lys Phe Pro Phe  
 275 280 285  
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 290 295 300  
 His Ile Asp Arg Thr Arg Lys Lys Arg Gly Glu Lys Glu Glu Thr Glu  
 305 310 315 320  
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 325 330 335  
 Gly Glu Pro Ser Ser Ile Met Asn Val Pro Gly Glu Ser Thr Leu Arg

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Glu Tyr Lys Arg Gln Leu Leu Ala Glu Arg Gln Lys Arg Ile Glu Gln
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Gln Lys Glu Gln Arg Arg Arg Leu Glu Glu Gln Gln Arg Arg Glu Arg
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Glu Ala Arg Arg Gln Gln Glu Arg Glu Gln Arg Arg Arg Glu Gln Glu
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Glu Lys Arg Arg Leu Glu Glu Leu Glu Arg Arg Arg Lys Glu Glu Glu
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Glu Arg Arg Arg Ala Glu Glu Glu Lys Arg Arg Val Glu Arg Glu Gln
          450          455          460
Glu Tyr Ile Arg Arg Gln Leu Glu Glu Glu Gln Arg His Leu Glu Val
465          470          475          480
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Glu Pro Ala Asp Arg Ala Arg Glu Val Pro Val Arg Thr Thr Ser Arg
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Pro Gly Ser Gln Ser Gly Ser Gly Glu Arg Phe Arg Val Arg Ser Ser
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Ser Lys Ser Glu Gly Ser Pro Ser Gln Arg Leu Glu Asn Ala Val Lys
625          630          635          640
Lys Pro Glu Asp Lys Lys Glu Val Phe Arg Pro Leu Lys Pro Ala Gly
          645          650          655
Glu Val Asp Leu Thr Ala Leu Ala Lys Glu Leu Arg Ala Val Glu Asp
          660          665          670
Val Arg Pro Pro His Lys Val Thr Asp Tyr Ser Ser Ser Ser Glu Glu
          675          680          685
Ser Gly Thr Thr Asp Glu Glu Asp Asp Asp Val Glu Gln Glu Gly Ala
          690          695          700
Asp Glu Ser Thr Ser Gly Pro Glu Asp Thr Arg Ala Ala Ser Ser Leu
705          710          715          720
Asn Leu Ser Asn Gly Glu Thr Glu Ser Val Lys Thr Met Ile Val His
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Asp Asp Val Glu Ser Glu Pro Ala Met Thr Pro Ser Lys Glu Gly Thr
          740          745          750
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Lys Ser Ser Ser Ser Phe Thr Pro Phe Ile Asp Pro Arg Leu Leu Gln

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Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu				
	835		840	845
Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly				
	850		855	860
Leu Met Leu Leu Asp Arg Ser Gly Gln Gly Lys Val Tyr Pro Leu Ile				
865		870		875
Asn Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu Gly Leu Asn Val				
	885		890	895
Leu Val Thr Ile Ser Gly Lys Lys Asp Lys Leu Arg Val Tyr Tyr Leu				
	900		905	910
Ser Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys				
	915		920	925
Lys Gln Gly Trp Thr Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr				
	930		935	940
Lys Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys				
945		950		955
Ser Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe				
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Asp Leu Thr Val Glu Glu Gly Gln Arg Leu Lys Val Ile Tyr Gly Ser				
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Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln				
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Cys Ser Ile Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly				
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Met Glu Leu Leu Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr				
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Tyr Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro				
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Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu				
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Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val				
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Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn				
	1125		1130	1135
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&lt;210&gt; 5561

&lt;211&gt; 2089

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 5562

&lt;211&gt; 372

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5562

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&lt;211&gt; 2878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5563

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<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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Phe	Ser	Glu	Leu	Ser	Phe	Arg	Ile	Ser	Glu	Leu	Ala	Arg	Glu	Pro	Arg	
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Arg	Gln	Val	Leu	Glu	Ser	Arg	Leu	Gln	Arg	Pro	Leu	Pro	Glu	Asp	Leu	
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Ala	Glu	Ala	Leu	Ala	Ser	Gly	Val	Ile	Leu	Cys	Gln	Leu	Ala	Asn	Gln	
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Pro	Lys	Leu	Ser	Ala	Leu	Lys	Ala	Arg	Lys	Asn	Val	Glu	Ser	Phe	Leu	
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 <211> 472  
 <212> DNA  
 <213> Homo sapiens

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 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 5566  
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 Leu Pro Pro Arg Leu Glu Ser Gly Gly Ala Ile Thr Ala His Ser Ser  
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 Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe  
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<210> 5567  
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 <212> DNA  
 <213> Homo sapiens

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 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 5568  
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 His Arg Ser Ile His Leu Ala Pro Leu Gln Ile Trp Val Leu Cys Lys  
 35 40 45  
 Ile Leu Pro Trp Asp Thr Glu Gly Lys Ser Asp Thr Ala Leu Leu Ser  
 50 55 60  
 Ser Ser Gln Thr Leu Arg Tyr Pro Asp Thr Thr Ala Leu Ile Val Ser  
 65 70 75 80  
 Glu Asn Thr Ala Thr Ser Ala Gly Lys Tyr Gln Arg Cys Phe Thr Arg  
 85 90 95  
 Tyr Met Tyr Gln Ile Leu Lys Ala Ala Val Pro Lys Tyr His Lys Leu  
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 His Gly Leu Lys Gln Gln Lys Phe Ile Pro Ser Gln Ser Trp Arg Pro  
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 Asp Val  
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<210> 5569  
 <211> 876

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5569

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&lt;210&gt; 5570

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5570

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Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35     40     45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50     55     60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65     70     75     80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85     90     95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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Val Leu Gln Ala Phe Ile Ser Phe Arg Ala Ala Pro Ser Leu Cys Pro
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Gly Thr Leu Ala Lys Met Gln Cys Leu Pro Asn Ser His Ile Ser Phe
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Asn Gln Gly Ala Ile Pro Ala Trp Lys Ser Pro Ser Cys Ser Cys Trp
145          150          155          160
Gln Val Gln Val Pro Val Cys Asp Gly
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<210> 5571  
 <211> 405  
 <212> DNA  
 <213> Homo sapiens

<400> 5571  
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<210> 5572  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 5572  
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 Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp Asp  
 35 40 45  
 Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn His  
 50 55 60  
 Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu Leu  
 65 70 75 80  
 Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu His  
 85 90 95  
 His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Met Met Ala  
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 Ser Arg Leu Gly Val Pro Arg

130

135

&lt;210&gt; 5573

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5573

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&lt;210&gt; 5574

<211> 312  
 <212> PRT  
 <213> Homo sapiens

<400> 5574  
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 Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu  
 35 40 45  
 Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val  
 50 55 60  
 Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys  
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 Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro  
 85 90 95  
 Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly  
 100 105 110  
 Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn  
 115 120 125  
 Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro  
 130 135 140  
 Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu  
 145 150 155 160  
 Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro  
 165 170 175  
 Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile  
 180 185 190  
 Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu  
 195 200 205  
 Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn  
 210 215 220  
 Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val  
 225 230 235 240  
 Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr  
 245 250 255  
 Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu  
 260 265 270  
 Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp  
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<210> 5575  
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 <212> DNA  
 <213> Homo sapiens

<400> 5575  
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 2405

<210> 5576

<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

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		20						25				30			
Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35				40					45				
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
	50				55					60					
Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65				70				75						80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90					95		
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100					105					110			
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
	115					120					125				
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
	130				135					140					
Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
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Leu	Lys	Leu	Ser	Ile	Thr	Lys	Lys	Ser	Ser	Pro	Ser	Val	Lys	Pro	Ala

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<210> 5577
<211> 659
<212> DNA
<213> Homo sapiens
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300
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360
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659

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<210> 5578  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 5578  
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 Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu  
 35 40 45  
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys  
 50 55 60  
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg  
 65 70 75 80  
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu  
 85 90 95  
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met  
 100 105 110  
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu  
 115 120 125  
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg  
 130 135 140  
 Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp  
 145 150 155 160  
 Cys Ser Ile Ala Glu Pro  
 165

<210> 5579  
 <211> 1312  
 <212> DNA  
 <213> Homo sapiens

<400> 5579  
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 180  
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 240  
 cctgcaccac cagctcaggc tcccttgcca ggaactgtta tgcaggctcc tgctgttcgg  
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 420  
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 480  
 ccacagcgtc tgccccaga agctgccagc acatctctgc ctcagaagcc acacttgaag  
 540

ttagcacgcg ttcagagtca aaatggcata gtactgtcat ggagtgtcct ggaggtggat  
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&lt;210&gt; 5580

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5580

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Gln	Pro	Ile	Gln	Pro	Ala	Pro	Pro	Leu	Gln	Pro	Ser	Gly	Val	Pro	Thr
			20					25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
			35				40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
			50			55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65				70					75						80
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85				90						95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
			100				105					110			
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
		115				120					125				
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
		130				135					140				
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
145				150						155					160
Pro	Gln	Arg	Leu	Pro	Pro	Glu	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Gln	Lys

				165					170					175			
Pro	His	Leu	Lys	Leu	Ala	Arg	Val	Gln	Ser	Gln	Asn	Gly	Ile	Val	Leu		
				180					185					190			
Ser	Trp	Ser	Val	Leu	Glu	Val	Asp	Arg	Ser	Cys	Ala	Thr	Val	Asp	Ser		
			195				200					205					
Tyr	His	Leu	Tyr	Ala	Tyr	His	Glu	Glu	Pro	Ser	Ala	Thr	Val	Pro	Ser		
	210					215					220						
Gln	Trp	Lys	Lys	Ile	Gly	Glu	Val	Lys	Ala	Leu	Pro	Leu	Pro	Met	Ala		
225					230					235					240		
Cys	Thr	Leu	Thr	Gln	Phe	Val	Ser	Gly	Ser	Lys	Tyr	Tyr	Phe	Ala	Val		
				245					250						255		
Arg	Ala	Lys	Asp	Ile	Tyr	Gly	Arg	Phe	Gly	Pro	Phe	Cys	Asp	Pro	Gln		
			260					265						270			
Ser	Thr	Asp	Val	Ile	Ser	Ser	Thr	Gln	Ser	Ser							
		275					280										

&lt;210&gt; 5581

&lt;211&gt; 720

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5581

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720

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&lt;210&gt; 5582

&lt;211&gt; 212

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5582

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20           25           30
Ser Leu Ala Ser Arg Glu Leu Pro Val Ser Ser Trp Gln Val Thr Glu
35           40           45
Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala
50           55           60
Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val
65           70           75           80
Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala
85           90           95
Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro
100          105          110
Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro
115          120          125
Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met
130          135          140
Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser
145          150          155          160
Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu
165          170          175
Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met
180          185          190
Thr Pro Ser Gly Gly Lys Ala Cys Val Trp Gly His Leu Pro Ser Ser
195          200          205
Ser His Thr Ile
210

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<210> 5583  
 <211> 2101  
 <212> DNA  
 <213> Homo sapiens

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<400> 5583
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600

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780  
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2100  
a  
2101

&lt;210&gt; 5584

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5584

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Xaa Gly Arg Asp Cys Val Leu Leu Gln Glu Asp Phe Leu Ala His Arg
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Gly Arg Pro His Val Tyr Leu Gln Arg Ile Gln Leu Asn Asn Pro Thr
          20           25           30
Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
          35           40           45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
          50           55           60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
65           70           75           80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
          85           90           95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
          100          105          110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
          115          120          125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
          130          135          140
Met Pro Ala Ala Glu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
145          150          155          160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
          165          170          175
Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
          180          185          190
Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
          195          200          205
Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
          210          215          220
Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
225          230          235          240
Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
          245          250          255
Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
          260          265          270
Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
          275          280          285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
          290          295          300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
305          310          315          320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
          325          330          335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
          340          345          350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
          355          360          365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
          370          375          380
Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

```

```

385          390          395          400
Glu His Met Ala Gln Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
          405          410          415
Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
          420          425          430
Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
          435          440          445
Lys Glu Asp Pro Ser Val
          450

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<210> 5585
<211> 740
<212> DNA
<213> Homo sapiens

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<400> 5585
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120
ctcacaagaa taaaatatac aatgctacat tgagtgggta aaaatacaca aaaaagtagt
180
tttaacaatc tataaatttt ttataactta aatcatgatt gagttgaaat aaaaaagtagt
240
atttcaattg ctaaaaaaat aatatcggtg tagttaacac aaggggggaaa tcagtacatt
300
gagggatctg acaggatgct ggaaaaaatg actcaggga gccgggcagc atgggctcct
360
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420
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600
tggaacttgac ataagtaccc cagccacatg gccttcatcc ttatgaccta gcaggcagaa
660
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acaagctttg taaacctaac
740

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<210> 5586
<211> 87
<212> PRT
<213> Homo sapiens

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<400> 5586
Met Gly Ser Phe Gly Asp Ser Gly Ala Glu Leu Ser Ser Thr Ser Leu
1      5      10      15
Gln Phe Pro Gly Ala Lys Gln Pro Ser Ser Pro Gln Tyr Leu Ser His
20     25     30
Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

```

	35				40					45							
Ser	Ser	Lys	Leu	Leu	Cys	Ser	Met	Thr	Ala	Ala	Cys	Pro	Thr	Leu	Ser		
	50					55					60						
Leu	Leu	Asp	Leu	Gln	Leu	Arg	Leu	Arg	Arg	Glu	Val	Gly	Glu	Gly	His		
65					70					75					80		
Cys	Pro	Ile	Leu	Asp	Leu	Thr											
					85												

&lt;210&gt; 5587

&lt;211&gt; 853

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5587

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300
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720
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840
ttccactcct gag
853

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&lt;210&gt; 5588

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5588

Met	Ala	Pro	Glu	His	Glu	Ile	Pro	Lys	Ile	Gly	Trp	Tyr	Ser	Arg	Phe		
1				5					10				15				
Ala	Arg	His	Pro	Phe	Tyr	Gly	Ser	Ala	Gly	Val	Asn	Ser	Gly	Val	Met		



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<210> 5589
<211> 1327
<212> DNA
<213> Homo sapiens
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<400> 5589
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120
gataacttca ccaagatgtc cagtgatagg caaagggtccg atgatgagag cccagcacc
180
agcagtggca gttcagatgc ggaccagcga gaccagccg ctccagagcc tgaagaacaa
240
gaggaaagaa aaccttctgc caccagcag aagaaaaaca ccaaactctc tagcaaaacc
300
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360
gatcctcctc ctaattgcag tgctgggcct aaaggagata acatttatga atggagatca
420
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480
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540
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600
gctttgacta tttcaaagggt ttgctgtct atttgttccc ttttgacaga ctgcaaccct
660
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720

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aggatagcca gacagtggac caagagatac gcaacataat tcacataatt tgtatgcagt  
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 840  
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 900  
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 aaaaaaa  
 1327

&lt;210&gt; 5590

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5590

Met	Ser	Ser	Asp	Arg	Gln	Arg	Ser	Asp	Asp	Glu	Ser	Pro	Ser	Thr	Ser
1				5					10					15	
Ser	Gly	Ser	Ser	Asp	Ala	Asp	Gln	Arg	Asp	Pro	Ala	Ala	Pro	Glu	Pro
			20					25					30		
Glu	Glu	Gln	Glu	Glu	Arg	Lys	Pro	Ser	Ala	Thr	Gln	Gln	Lys	Lys	Asn
		35					40					45			
Thr	Lys	Leu	Ser	Ser	Lys	Thr	Thr	Ala	Lys	Leu	Ser	Thr	Ser	Ala	Lys
	50				55					60					
Arg	Ile	Gln	Lys	Glu	Leu	Ala	Glu	Ile	Thr	Leu	Asp	Pro	Pro	Pro	Asn
65					70					75					80
Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr
				85				90						95	
Ile	Leu	Gly	Pro	Pro	Gly	Ser	Val	Tyr	Glu	Gly	Gly	Val	Phe	Phe	Leu
		100						105					110		
Asp	Ile	Thr	Phe	Ser	Ser	Asp	Tyr	Pro	Phe	Lys	Pro	Pro	Lys	Val	Thr
		115					120					125			
Phe	Arg	Thr	Arg	Ile	Tyr	His	Cys	Asn	Ile	Asn	Ser	Gln	Gly	Val	Ile
		130				135					140				
Cys	Leu	Asp	Ile	Leu	Lys	Asp	Asn	Trp	Ser	Pro	Ala	Leu	Thr	Ile	Ser
145					150					155					160
Lys	Val	Leu	Leu	Ser	Ile	Cys	Ser	Leu	Leu	Thr	Asp	Cys	Asn	Pro	Ala
				165				170						175	
Asp	Pro	Leu	Val	Gly	Ser	Ile	Ala	Thr	Gln	Tyr	Leu	Thr	Asn	Arg	Ala
			180					185					190		
Glu	His	Asp	Arg	Ile	Ala	Arg	Gln	Trp	Thr	Lys	Arg	Tyr	Ala	Thr	

195

200

205

&lt;210&gt; 5591

&lt;211&gt; 2194

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5591

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<210> 5592

<211> 580

<212> PRT

<213> Homo sapiens

<400> 5592

Met	Pro	Ser	Gly	Ser	Ala	Arg	Pro	Val	Ala	Pro	Gly	Ala	Arg	Arg	Leu
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Val	Pro	Cys	Arg	Thr	Pro	Thr	Arg	Gln	Leu	Arg	Glu	Glu	Leu	Val	Ile
			20					25					30		
Thr	Pro	Leu	Pro	Ser	Gly	Asp	Val	Ala	Ala	Thr	Phe	Gln	Phe	Arg	Thr
			35				40					45			
Arg	Trp	Asp	Ser	Asp	Leu	Gln	Arg	Glu	Gly	Val	Ser	His	Tyr	Arg	Leu
	50					55					60				
Phe	Pro	Lys	Ala	Leu	Gly	Gln	Leu	Ile	Ser	Lys	Tyr	Ser	Leu	Arg	Glu
65					70					75				80	
Leu	His	Leu	Ser	Phe	Thr	Gln	Gly	Phe	Trp	Arg	Thr	Arg	Tyr	Trp	Gly
				85				90						95	Pro Phe Leu
Gln	Ala	Pro	Ser	Gly	Ala	Glu	Leu	Trp	Val	Trp	Phe				
			100					105						110	
Gln	Asp	Thr	Val	Thr	Asp	Val	Asp	Lys	Ser	Trp	Arg	Glu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Ser	Gly	Ile	Phe	Cys	Ala	Ser	Leu	Asn	Phe	Ile	Asp	Ser	Thr
	130					135					140				
Asn	Thr	Val	Thr	Pro	Thr	Ala	Ser	Phe	Lys	Pro	Leu	Gly	Leu	Ala	Asn

```

145          150          155          160
Asp Thr Asp His Tyr Phe Leu Arg Tyr Ala Val Leu Pro Arg Glu Val
          165          170          175
Val Cys Thr Glu Asn Leu Thr Pro Trp Lys Lys Leu Leu Pro Cys Ser
          180          185          190
Ser Lys Ala Gly Leu Ser Val Leu Leu Lys Ala Asp Arg Leu Phe His
          195          200          205
Thr Ser Tyr His Ser Gln Ala Val His Ile Arg Pro Val Cys Arg Asn
          210          215          220
Ala Arg Cys Thr Ser Ile Ser Trp Glu Leu Arg Gln Thr Leu Ser Val
          225          230          235          240
Val Phe Asp Ala Phe Ile Thr Gly Gln Gly Lys Lys Asp Trp Ser Leu
          245          250          255
Phe Arg Met Phe Ser Arg Thr Leu Thr Glu Pro Cys Pro Leu Ala Ser
          260          265          270
Glu Ser Arg Val Tyr Val Asp Ile Thr Thr Tyr Asn Gln Pro Cys Leu
          275          280          285
Cys Val Gln Asp Asn Glu Thr Leu Glu Val His Pro Pro Pro Thr Thr
          290          295          300
Thr Tyr Gln Asp Val Ile Leu Gly Thr Arg Lys Thr Tyr Ala Ile Tyr
          305          310          315          320
Asp Leu Leu Asp Thr Ala Met Ile Asn Asn Ser Arg Asn Leu Asn Ile
          325          330          335
Gln Leu Lys Trp Lys Arg Pro Pro Glu Asn Glu Ala Pro Pro Val Pro
          340          345          350
Phe Leu His Ala Gln Arg Tyr Val Ser Gly Tyr Gly Leu Gln Lys Gly
          355          360          365
Glu Leu Ser Thr Leu Leu Tyr Asn Thr His Pro Tyr Arg Ala Phe Pro
          370          375          380
Val Leu Leu Leu Asp Thr Val Pro Trp Tyr Leu Arg Leu Tyr Val His
          385          390          395          400
Thr Leu Thr Ile Thr Ser Lys Gly Lys Glu Asn Lys Pro Ser Tyr Ile
          405          410          415
His Tyr Gln Pro Ala Gln Asp Arg Leu Gln Pro His Leu Leu Glu Met
          420          425          430
Leu Ile Gln Leu Pro Ala Asn Ser Val Thr Lys Val Ser Ile Gln Phe
          435          440          445
Glu Arg Ala Leu Leu Lys Trp Thr Glu Tyr Thr Pro Asp Pro Asn His
          450          455          460
Gly Phe Tyr Val Ser Pro Ser Val Leu Ser Ala Leu Val Pro Ser Met
          465          470          475          480
Val Ala Ala Lys Pro Val Asp Trp Glu Glu Ser Pro Leu Phe Asn Ser
          485          490          495
Leu Phe Pro Val Ser Asp Gly Ser Asn Tyr Phe Val Arg Leu Tyr Thr
          500          505          510
Glu Pro Leu Leu Val Asn Leu Pro Thr Pro Asp Phe Ser Met Pro Tyr
          515          520          525
Asn Val Ile Cys Leu Thr Cys Thr Val Val Ala Val Cys Tyr Gly Ser
          530          535          540
Phe Tyr Asn Leu Leu Thr Arg Thr Phe His Ile Glu Glu Pro Arg Thr
          545          550          555          560
Gly Gly Leu Ala Lys Arg Leu Ala Asn Leu Ile Arg Arg Ala Arg Gly
          565          570          575
Val Pro Pro Leu

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580

&lt;210&gt; 5593

&lt;211&gt; 3078

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5593

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 <212> DNA  
 <213> Homo sapiens



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&lt;210&gt; 5598

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5598

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&lt;210&gt; 5599

&lt;211&gt; 4492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5599

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<211> 923

<212> PRT

<213> Homo sapiens

<400> 5600

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Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
	50					55					60				
Thr	Leu	Val	Ala	Leu	Asp	Glu	Ala	Leu	Asp	Asn	Tyr	Thr	Ile	Thr	Phe
65					70					75					80
Leu	Ile	Arg	Gly	Val	Ala	Ile	Gly	Gln	Thr	Ser	Leu	Thr	Ala	Ser	Val
				85					90					95	
Thr	Asn	Lys	Ala	Gly	Gln	Arg	Ile	Asn	Ser	Ala	Pro	Gln	Gln	Ile	Glu
			100					105					110		
Val	Phe	Pro	Pro	Phe	Arg	Leu	Met	Pro	Arg	Lys	Val	Thr	Leu	Leu	Ile
			115				120					125			
Gly	Ala	Thr	Met	Gln	Val	Thr	Ser	Glu	Gly	Gly	Pro	Gln	Pro	Gln	Ser
			130				135				140				
Asn	Ile	Leu	Phe	Ser	Ile	Ser	Asn	Glu	Ser	Val	Ala	Leu	Val	Ser	Ala
145					150					155					160
Ala	Gly	Leu	Val	Gln	Gly	Leu	Ala	Ile	Gly	Asn	Gly	Thr	Val	Ser	Gly
				165					170					175	
Leu	Val	Gln	Ala	Val	Asp	Ala	Glu	Thr	Gly	Lys	Val	Val	Ile	Ile	Ser
			180					185					190		
Gln	Asp	Leu	Val	Gln	Val	Glu	Val	Leu	Leu	Leu	Arg	Ala	Val	Arg	Ile
			195				200					205			
Arg	Ala	Pro	Ile	Met	Arg	Met	Arg	Thr	Gly	Thr	Gln	Met	Pro	Ile	Tyr
			210				215					220			
Val	Thr	Gly	Ile	Thr	Asn	His	Gln	Asn	Pro	Phe	Ser	Phe	Gly	Asn	Ala
225					230					235					240
Val	Pro	Gly	Leu	Thr	Phe	His	Trp	Ser	Val	Thr	Lys	Arg	Asp	Val	Leu
				245					250					255	
Asp	Leu	Arg	Gly	Arg	His	His	Glu	Ala	Ser	Ile	Arg	Leu	Pro	Ser	Gln
			260					265					270		
Tyr	Asn	Phe	Ala	Met	Asn	Val	Leu	Gly	Arg	Val	Lys	Gly	Arg	Thr	Gly
			275				280					285			
Leu	Arg	Val	Val	Val	Lys	Ala	Val	Asp	Pro	Thr	Ser	Gly	Gln	Leu	Tyr
			290				295				300				
Gly	Leu	Ala	Arg	Glu	Leu	Ser	Asp	Glu	Ile	Gln	Val	Gln	Val	Phe	Glu



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305          310          315          320
Lys Leu Gln Leu Leu Asn Pro Glu Ile Glu Ala Glu Gln Ile Leu Met
          325          330          335
Ser Pro Asn Ser Tyr Ile Lys Leu Gln Thr Asn Arg Asp Gly Ala Ala
          340          345          350
Ser Leu Ser Tyr Arg Val Leu Asp Gly Pro Glu Lys Val Pro Val Val
          355          360          365
His Val Asp Glu Lys Gly Phe Leu Ala Ser Gly Ser Met Ile Gly Thr
          370          375          380
Ser Thr Ile Glu Val Ile Ala Gln Glu Pro Phe Gly Ala Asn Gln Thr
385          390          395          400
Ile Ile Val Ala Val Lys Val Ser Pro Val Ser Tyr Leu Arg Val Ser
          405          410          415
Met Ser Pro Val Leu His Thr Gln Asn Lys Glu Ala Leu Val Ala Val
          420          425          430
Pro Leu Gly Met Thr Val Thr Phe Thr Val His Phe His Asp Asn Ser
          435          440          445
Gly Asp Val Phe His Ala His Ser Ser Val Leu Asn Phe Ala Thr Asn
          450          455          460
Arg Asp Asp Phe Val Gln Ile Gly Lys Gly Pro Thr Asn Asn Thr Cys
465          470          475          480
Val Val Arg Thr Val Ser Val Gly Leu Thr Leu Leu Arg Val Trp Asp
          485          490          495
Ala Glu His Pro Gly Leu Ser Asp Phe Met Pro Leu Pro Val Leu Gln
          500          505          510
Ala Ile Ser Pro Glu Leu Ser Gly Ala Met Val Val Gly Asp Val Leu
          515          520          525
Cys Leu Ala Thr Val Leu Thr Ser Leu Glu Gly Leu Ser Gly Thr Trp
          530          535          540
Ser Ser Ser Ala Asn Ser Ile Leu His Ile Asp Pro Lys Thr Gly Val
545          550          555          560
Ala Val Ala Arg Ala Val Gly Ser Val Thr Val Tyr Tyr Glu Val Ala
          565          570          575
Gly His Leu Arg Thr Tyr Lys Glu Val Val Val Ser Val Pro Gln Arg
          580          585          590
Ile Met Ala Arg His Leu His Pro Ile Gln Thr Ser Phe Gln Glu Ala
          595          600          605
Thr Ala Ser Lys Val Ile Val Ala Val Gly Asp Arg Ser Ser Asn Leu
          610          615          620
Arg Gly Glu Cys Thr Pro Thr Gln Arg Glu Val Ile Gln Ala Leu His
625          630          635          640
Pro Glu Thr Leu Ile Ser Cys Gln Ser Gln Phe Lys Pro Ala Val Phe
          645          650          655
Asp Phe Pro Ser Gln Asp Val Phe Thr Val Glu Pro Gln Phe Asp Thr
          660          665          670
Ala Leu Gly Gln Tyr Phe Cys Ser Ile Thr Met His Arg Leu Thr Asp
          675          680          685
Lys Gln Arg Lys His Leu Ser Met Lys Lys Thr Ala Leu Val Val Ser
          690          695          700
Ala Ser Leu Ser Ser Ser His Phe Ser Thr Glu Gln Val Gly Ala Glu
705          710          715          720
Val Pro Phe Ser Pro Gly Leu Phe Ala Asp Gln Ala Glu Ile Leu Leu
          725          730          735
Ser Asn His Tyr Thr Ser Ser Glu Ile Arg Val Phe Gly Ala Pro Glu

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60
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240
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670

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<210> 5602  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

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 Arg Arg Thr Thr Ala Ser Leu Leu Arg Lys Leu Thr Thr Ala Ser Asn  
 35 40 45  
 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val  
 50 55 60  
 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys  
 65 70 75 80  
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met  
 85 90 95  
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu  
 100 105 110  
 Leu Ser Val Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile  
 115 120 125  
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val  
 130 135 140  
 Leu Lys Lys Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg  
 145 150 155 160  
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu  
 165 170 175  
 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln  
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 Val Pro Leu His Ala  
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<210> 5603  
 <211> 2070  
 <212> DNA  
 <213> Homo sapiens

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 180  
 aattagcttt ttttctcttg cagattccag agagtcctct atttcatatg tgccttccag  
 240  
 aacatctctt gtggatttca ctacttggct tctgtgttca tgggagtcac ccctcatcat  
 300  
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 360

ttggaggaca ccggggccct gttgtcttca ggccagaaag attatgttac ggtgcagtgtg  
420  
cagaatggtg agatctggga gctctcaagg tgtagcagga ataagaggga gaacacatcg  
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720  
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1740  
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1800  
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1860  
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1920  
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1980

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 2040  
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 2070

<210> 5604

<211> 560

<212> PRT

<213> Homo sapiens

<400> 5604

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Cys	Gly	Ile	His	Tyr	Leu	Ala	Ser	Val	Phe	Met	Gly	Val	Thr	Pro	His
			20					25					30		
His	Val	Cys	Arg	Pro	Pro	Gly	Asn	Val	Ser	Gln	Val	Val	Phe	His	Asn
			35				40					45			
His	Ser	Asn	Trp	Ser	Leu	Glu	Asp	Thr	Gly	Ala	Leu	Leu	Ser	Ser	Gly
	50					55					60				
Gln	Lys	Asp	Tyr	Val	Thr	Val	Gln	Leu	Gln	Asn	Gly	Glu	Ile	Trp	Glu
65					70					75					80
Leu	Ser	Arg	Cys	Ser	Arg	Asn	Lys	Arg	Glu	Asn	Thr	Ser	Ser	Leu	Gly
			85						90					95	
Tyr	Glu	Tyr	Thr	Gly	Ser	Lys	Lys	Glu	Phe	Pro	Cys	Val	Asp	Gly	Tyr
			100					105					110		
Ile	Tyr	Asp	Gln	Asn	Thr	Trp	Lys	Ser	Thr	Ala	Val	Thr	Gln	Trp	Asn
			115				120						125		
Leu	Val	Cys	Asp	Arg	Lys	Trp	Leu	Ala	Met	Leu	Ile	Gln	Pro	Leu	Phe
	130					135					140				
Met	Phe	Gly	Val	Leu	Leu	Gly	Ser	Val	Thr	Phe	Gly	Tyr	Phe	Ser	Asp
145					150					155					160
Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met	Phe
			165						170					175	
Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe	Met
			180				185						190		
Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val	Val
		195					200					205			
Gly	Phe	Val	Tyr	Val	Met	Glu	Phe	Ile	Gly	Met	Lys	Ser	Arg	Thr	Trp
	210					215					220				
Ala	Ser	Val	His	Leu	His	Ser	Phe	Phe	Ala	Val	Gly	Thr	Leu	Leu	Val
225					230					235					240
Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met	Ile
			245						250					255	
Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu	Pro
			260					265					270		
Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala	Gln
		275					280					285			
Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys
	290					295					300				
Leu	Ser	Glu	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Gly	Pro	Val	Ser	Asn	Ser
305					310					315					320
Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp
			325						330					335	
Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr	Gly

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          340          345          350
Ser Leu Gly Phe Tyr Ser Phe Ser Leu Asn Ser Val Asn Leu Gly Gly
          355          360          365
Asn Glu Tyr Leu Asn Leu Phe Leu Leu Gly Val Val Glu Ile Pro Ala
          370          375          380
Tyr Thr Phe Val Cys Ile Ala Met Asp Lys Val Gly Arg Arg Thr Val
385          390          395          400
Leu Ala Tyr Ser Leu Phe Cys Ser Ala Leu Ala Cys Gly Val Val Met
          405          410          415
Val Ile Pro Gln Lys His Tyr Ile Leu Gly Val Val Thr Ala Met Val
          420          425          430
Gly Lys Phe Ala Ile Gly Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr
          435          440          445
Ala Glu Leu Tyr Pro Thr Ile Val Arg Ser Leu Ala Val Gly Ser Gly
          450          455          460
Ser Met Val Cys Arg Leu Ala Ser Ile Leu Ala Pro Phe Ser Val Asp
465          470          475          480
Leu Ser Ser Ile Trp Ile Phe Ile Pro Gln Leu Phe Val Gly Thr Met
          485          490          495
Ala Leu Leu Ser Gly Val Leu Thr Leu Lys Leu Pro Glu Thr Leu Gly
          500          505          510
Lys Arg Leu Ala Thr Thr Trp Glu Ala Ala Lys Leu Glu Ser Glu
          515          520          525
Asn Glu Ser Lys Ser Ser Lys Leu Leu Leu Thr Thr Asn Asn Ser Gly
          530          535          540
Leu Glu Lys Thr Glu Ala Ile Thr Pro Arg Asp Ser Gly Leu Gly Glu
545          550          555          560

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 <211> 376  
 <212> DNA  
 <213> Homo sapiens

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 120  
 catccaggga ggcctctcca gggaggatga cggaacatca gaggaaagaa gcaaggagaa  
 180  
 ccagccacac tcagagctgg gaaagagcag caggaagatg ggggcagtga gtgccagggc  
 240  
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<210> 5606  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 5606

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Met Thr Arg Ala Leu Leu Thr Ser Leu Val Leu Leu Pro Ala Arg Gln
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Ala His Pro Cys Arg Ala Leu Ala Leu Thr Ala Pro Ile Phe Leu Leu
      20           25           30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35           40           45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50           55           60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
      65           70           75           80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
      85           90           95
Phe Pro Phe Thr Arg
      100

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&lt;210&gt; 5607

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5607

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ggtttggggcc gacacgcgga aggccgggtg gagcccatcc atgctgtggt gttgcctcga
120
gggaagtgcg tggaccagtg tgtggagacc ctgcagaagc agaccagggt tggcaaggct
180
ggcaccaaca agccccccag gtgccgggga agaggggcca ggcctggggg ccgcccagct
240
cctcggaatg tgtttgactt cctcaatgaa aagctgcaag gtcaggctcc tggggcccta
300
caagccgggc ggcctcagca
320

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&lt;210&gt; 5608

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5608

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Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
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Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20           25           30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35           40           45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50           55           60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
      65           70           75           80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85           90           95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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100

105

&lt;210&gt; 5609

&lt;211&gt; 1843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5609

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1380

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 <211> 153  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Leu Leu Val Asp Ser Cys Met Gln Glu Ala Val Met Gly Ser Leu Arg  
 50 55 60  
 Ile Pro Gln Cys Gly Asn Gly Pro Leu Arg Leu Val Leu Arg Val Pro  
 65 70 75 80  
 Gly Ala Gln Ser Trp Val Gly Gly Cys Trp Trp Glu Val Arg Asn Lys  
 85 90 95  
 Phe Trp Leu Pro Ser Gly Gln Leu Pro Thr Ala Leu Thr Trp Glu Val  
 100 105 110  
 Asp Ala His Arg Gln Asp Ala Leu Gly Tyr Cys Cys Thr Val Leu His  
 115 120 125  
 Glu Ile Phe Ile Gln Pro Thr Arg Phe Asn Arg Ser Leu Gly Ser Ser  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5612

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5612

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			20					25					30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
			35				40					45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
			50			55					60				
Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
65				70						75				80	
Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu	Phe	Gln	Val	His	Thr	Phe

			85					90					95				
Glu	Ile	Phe	Gln	Lys	Glu	Leu	Asn	Glu	Ser	Glu	Asn	Ser	Val	Phe	Gln		
			100					105					110				
Ala	Val	Tyr	Gly	Leu	Gln	Arg	Ala	Leu	Gln	Gly	Asp	Tyr	Lys	Asp	Val		
			115					120					125				
Val	Asn	Met	Lys	Glu	Ser	Ser	Arg	Gln	Arg	Leu	Glu	Ala	Leu	Arg	Glu		
			130					135					140				
Ala	Ala	Ile	Lys	Glu	Glu	Thr	Glu	Tyr	Met	Glu	Leu	Leu	Ala	Ala	Glu		
			145					150					155				
Lys	His	Gln	Val	Glu	Ala	Leu	Lys	Asn	Met	Gln	His	Gln	Asn	Gln	Ser		
			165					170					175				
Leu	Ser	Met	Leu	Asp	Glu	Ile	Leu	Glu	Asp	Val	Arg	Lys	Ala	Ala	Asp		
			180					185					190				
Arg	Leu	Glu	Glu	Glu	Ile	Glu	Glu	His	Ala	Phe	Asp	Asp	Asn	Lys	Ser		
			195					200					205				
Val	Lys	Gly	Val	Asn	Phe	Glu	Ala	Val	Leu	Arg	Val	Glu	Glu	Glu	Glu		
			210					215					220				
Ala	Asn	Ser	Lys	Gln	Asn	Ile	Thr	Lys	Arg	Glu	Val	Glu	Asp	Asp	Leu		
			225					230					235				
Val	Leu	Ser	Met	Leu	Ile	Asp	Ser	Gln	Asn	Asn	Gln	Tyr	Ile	Leu	Thr		
			245					250					255				
Lys	Pro	Arg	Asp	Ser	Thr	Ile	Pro	Arg	Ala	Asp	His	His	Phe	Ile	Lys		
			260					265					270				
Asp	Ile	Val	Thr	Ile	Gly	Met	Leu	Ser	Leu	Pro	Cys	Gly	Trp	Arg	Cys		
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Thr																	

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<212> DNA
<213> Homo sapiens
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240
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300
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480
aaaaaggaat gtgcggcaag aggagaagac tatgagaaaag tgaagttgct ggagatcagt
540
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 720  
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 780  
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&lt;210&gt; 5614

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5614

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Ser	Leu	Ala	Ala	Ala	Ala	Glu	Leu	Ala	Ala	Gln	Lys	Arg	Glu	Gln	Arg
		20						25					30		
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
		35					40					45			
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50					55					60				
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
65					70					75				80	
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys



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 <213> Homo sapiens

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 Ser Ser Ser Thr Val Pro Pro Pro His Arg Pro Leu Tyr Gln Pro  
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 Met Gln Pro His Pro Gln His Leu Ala Ser Met Gly Phe Asp Pro Arg  
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 Trp Leu Met Met Gln Ser Tyr Met Asp Pro Arg Met Met Ser Gly Arg  
 85 90 95  
 Pro Ala Met Asp Ile Pro Pro Ile His Pro Gly Met Ile Pro Pro Lys  
 100 105 110  
 Pro Leu Met Arg Arg Asp Gln Met Glu Gly Ser Pro Asn Ser Ser Glu  
 115 120 125  
 Ser Phe Glu His Ile Ala Arg Ser Ala Arg Asp His Ala Ile Ser Leu  
 130 135 140  
 Ser Glu Pro Arg Met Leu Trp Gly Ser Asp Pro Tyr Pro His Ala Glu  
 145 150 155 160  
 Pro Gln Gln Ala Thr Thr Pro Lys Ala Thr Glu Glu Pro Glu Asp Val

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      260      265      270
Ser Asn His Thr Gln Lys Pro Asp Glu Gln Arg Ser Glu Pro Ser Ala
      275      280      285
Gly Ile Pro Lys Val Thr Ser Arg Cys Ile Asp Ser Lys Glu Pro Ile
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Glu Arg Pro Glu Glu Lys Pro Lys Lys Glu Gly Phe Ile Arg Ser Ser
305      310      315      320
Glu Gly Pro Lys Pro Glu Lys Val Tyr Lys Ser Lys Ser Glu Thr Arg
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Trp Gly Pro Arg Pro Ser Ser Asn Arg Arg Glu Glu Val Asn Asp Arg
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Pro Val Arg Arg Ser Gly Pro Ile Lys Lys Pro Val Leu Arg Asp Met
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Asp Leu Pro Pro Pro Pro Pro Pro Pro Gln Pro Pro Ala Pro Ile Gln
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      420      425      430
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Lys Pro Leu Glu Pro Val Ser Thr Val Gln Val Glu Pro Ala Val Lys
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Thr Val Asn Gln Gln Thr Met Ala Ala Pro Val Val Lys Glu Lys Glu
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&lt;210&gt; 5617

&lt;211&gt; 3480

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5617

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<210> 5618  
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 <212> PRT  
 <213> Homo sapiens

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 Thr Thr Pro Lys Ser Phe Leu Glu Gln Ile Ser Leu Phe Lys Asn Leu  
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 65 70 75 80  
 Lys Ala Arg Leu Ala Ser Gln Glu Ala Glu Leu Gln Leu Arg Asn His  
 85 90 95  
 Asp Ala Glu Ala Leu Ile Thr Lys Ile Gly Leu Gln Thr Glu Lys Val  
 100 105 110  
 Ser Arg Glu Lys Thr Ile Ala Asp Ala Glu Glu Arg Lys Val Thr Ala  
 115 120 125  
 Ile Gln Thr Glu Val Phe Gln Lys Gln Arg Glu Cys Glu Ala Asp Leu  
 130 135 140  
 Leu Lys Ala Glu Pro Ala Leu Val Ala Ala Thr Ala Ala Leu Asn Thr  
 145 150 155 160  
 Leu Asn Arg Val Asn Leu Ser Glu Leu Lys Ala Phe Pro Asn Pro Pro  
 165 170 175  
 Ile Ala Val Thr Asn Val Thr Ala Ala Val Met Val Leu Leu Ala Pro  
 180 185 190  
 Arg Gly Arg Val Pro Lys Asp Arg Ser Trp Lys Ala Ala Lys Val Phe  
 195 200 205  
 Met Gly Lys Val Asp Asp Phe Leu Gln Ala Leu Ile Asn Tyr Asp Lys  
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 225 230 235 240  
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 290 295 300  
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385          390          395          400
Leu Pro Ser Asp Arg Met Ser Thr Glu Asn Ala Ala Ile Leu Thr His
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Cys Glu Arg Trp Pro Leu Val Ile Asp Pro Gln Gln Gln Gly Ile Lys
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Trp Ile Lys Asn Lys Tyr Gly Met Asp Leu Lys Val Thr His Leu Gly
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Gln Lys Gly Phe Leu Asn Ala Ile Glu Thr Ala Leu Ala Phe Gly Asp
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465          470          475          480
Pro Leu Leu Gly Arg Asn Thr Ile Lys Lys Gly Lys Tyr Ile Arg Ile
          485          490          495
Gly Asp Lys Glu Cys Glu Phe Asn Lys Asn Phe Arg Leu Ile Leu His
          500          505          510
Thr Lys Leu Ala Asn Pro His Tyr Lys Pro Glu Leu Gln Ala Gln Thr
          515          520          525
Thr Leu Leu Asn Phe Thr Val Thr Glu Asp Gly Leu Glu Ala Gln Leu
          530          535          540
Leu Ala Glu Val Val Ser Ile Glu Arg Pro Asp Leu Glu Lys Leu Lys
545          550          555          560
Leu Val Leu Thr Lys His Gln Asn Asp Phe Lys Ile Glu Leu Lys Tyr
          565          570          575
Leu Glu Asp Asp Leu Leu Leu Arg Leu Ser Ala Ala Glu Gly Ser Phe
          580          585          590
Leu Asp Asp Thr Lys Leu Val Glu Arg Leu Glu Ala Thr Lys Thr Thr
          595          600          605
Val Ala Glu Ile Glu His Lys Val Ile Glu Ala Lys Glu Asn Glu Arg
          610          615          620
Lys Ile Asn Glu Ala Arg Glu Cys Tyr Arg Pro Val Ala Ala Arg Ala
625          630          635          640
Ser Leu Leu Tyr Phe Val Ile Asn Asp Leu Gln Lys Ile Asn Pro Leu
          645          650          655
Tyr Gln Phe Ser Leu Lys Ala Phe Asn Val Leu Phe His Arg Ala Ile
          660          665          670
Glu Gln Ala Asp Lys Val Glu Asp Met Gln Gly Arg Ile Ser Ile Leu
          675          680          685
Met Glu Ser Ile Thr His Ala Val Phe Leu Tyr Thr Ser Gln Ala Leu
          690          695          700
Phe Glu Lys Asp Lys Leu Thr Phe Leu Ser Gln Met Ala Phe Gln Ile
705          710          715          720
Leu Leu Arg Lys Lys Glu Ile Asp Pro Leu Glu Leu Asp Phe Leu Leu
          725          730          735
Arg Phe Thr Val Glu His Thr His Leu Ser Pro Val Asp Phe Leu Thr
          740          745          750
Ser Gln Ser Trp Ser Ala Ile Lys Ala Ile Ala Val Met Glu Glu Phe
          755          760          765
Arg Gly Ile Asp Arg Asp Val Glu Gly Ser Ala Lys Gln Trp Arg Lys

```

770		775		780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp				
785		790		795
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg				800
	805		810	815
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu				
	820		825	830
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe				
	835		840	845
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly				
	850		855	860
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe				
865		870		875
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln				
	885		890	895
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His				
	900		905	910
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr				
	915		920	925
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr				
	930		935	940
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile				
945		950		955
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro				
	965		970	975
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp				
	980		985	990
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln				
	995		1000	

&lt;210&gt; 5619

&lt;211&gt; 1219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5619

```

aagccggaga gctggagctt tgaagccacc ccggtcaaag gatgctgagt ccggagcgcc
60
tagccctacc ggactacgag tatctggctc agcgacatgt cctcacctac atggaggatg
120
cagtgtgcca gctgctagaa aacaggggaag atattagcca atatggaatt gccaggttct
180
tactgaata ttttaacagt gtatgccagg gaacacacat tctctttcga gaattcagct
240
tcgtccaagc cccccccac aatagggtat cattttttacg ggccttctgg agatgcttcc
300
gaactgtggg caaaaatggc gatttgctga ccatgaaaga atatcactgt ttgctgcaat
360
tactgtgtcc tgatttcccg ctggagctca ctcagaaagc agccaggatt gtgctcatgg
420
acgatgccat ggactgcttg atgtcttttt cagatttctt ctttgccttc cagatccagt
480
tttactactc agaattcctg gacagtgtgg ctgccatcta tgaggacctg ctgtcaggca
540

```

agaaccccaa cacagtgatt gtgccgacgt cgtccagtgg gcagcaccgc caacgacctg  
 600  
 ccttggggcgg ggccggcacg ctggagggcg tggaggcgtc gctgttctac cagtgtctgg  
 660  
 aaaacctgtg tgatcggcac aagtacagct gcccaccccc agcacttgtc aaagaggccc  
 720  
 tcagcaatgt tcagagactg accttctatg gattcctcat ggctctctca aagcaccgtg  
 780  
 gaatcaacca agccctcggg aagtcagagc taagcagccg tcagcctctc ctgccgcaca  
 840  
 acacagggag cagctggcct ctgttagcaa cacgggtcca gaggggaagg ggcatcacca  
 900  
 tctctgcctt gacttcccag ggccggactc aatcccaggg agcaggaata tggcgacaaa  
 960  
 acatggctct tacacattcc catggtaggg gacagccctc cctgcctgca gccctgcccc  
 1020  
 aacatgaaac cacctcccca tagcagaagc gccagcccc tcctcagaga accccagctc  
 1080  
 tgctttgggg agcagcctgc aggtcgggca gacacaggac tatttactca gtgacgctag  
 1140  
 agattatata tcagagagac ctgaatccca tttataaaca aggcaaaggt gtgtctgcgg  
 1200  
 agaccttttt tccaagctg  
 1219

&lt;210&gt; 5620

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5620

Met	Leu	Ser	Pro	Glu	Arg	Leu	Ala	Leu	Pro	Asp	Tyr	Glu	Tyr	Leu	Ala
1				5					10					15	
Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
	35					40					45				
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
	50				55					60					
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65				70				75						80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90					95		
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
		100					105						110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp	
	115				120					125					
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
	130				135					140					
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145				150					155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165				170						175		
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

```

<400> 5622
Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
 1           5           10           15
Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
      20           25           30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

```

```

      35          40          45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
      50          55          60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
      65          70          75          80
Thr Gly

```

<210> 5623  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

```

<400> 5623
nctggaagaa ctcgtcatgc tctttgtagc gtggtgcttc tgttgctcac aggacaactt
60
gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
120
cgggtcaatgc ctctgggagc aaggatcctt ttccacgggtg tgttctatgc cgggggcttt
180
gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
240
gtggagcagc tgcagagcca tcccaggga caggaagctc tgggccctcc tctcaacatc
300
cattatctca agctcatcga cagggaacac ttcgtggaca ttgttgatgc caagttg
357

```

<210> 5624  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

```

<400> 5624
Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
1          5          10          15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
          20          25          30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
          35          40          45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
          50          55          60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
65          70          75          80
Val Asp Ile Val Asp Ala Lys Leu
          85

```

<210> 5625  
 <211> 1017  
 <212> DNA  
 <213> Homo sapiens

```

<400> 5625
gccgactcgt ggtacctggc gcttctgggc ttcgtgagc acttccgcac ttccagcccg
60

```

cccaaaatcc gctgtgctg gcaactgctg caggccgtgt tccccttcaa gccgccgcag  
 120  
 cgcatcgagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac  
 180  
 agcgagcagg cgcgagcca cctggagaag gcgtggttga tatcacagca aatcccacag  
 240  
 ttcgaagatg ttaaatttga agcagcaagt ctgttgtctg aattgtactg tcaagagaat  
 300  
 tccgttgatg cagcaaagcc gctgctgctg aaggcgatcc agatctcaca gcagacccca  
 360  
 tattggcact gccgctgct cttccagctc gctcaactgc acacgcttga gaaggacctg  
 420  
 gtgtcggcct gtgacctcct ggggtgtaggg gccgagtacg cccgggtggt gggatctgaa  
 480  
 tacacacggg cgctgttcct cctcagcaag gggatgctgc tgctgatgga gcgaaagctg  
 540  
 caggaggtgc acccgctgct gaccctctgc gggcagatcg tggagaactg gcaggggaac  
 600  
 cccatccaga aggagtcgct gcgtgtcttc ttctggtgc tccaggtcac ccactatctg  
 660  
 gatgccgggc aggtgaagag cgtgaagccg tgtctgaagc agctgcagca gtgcatccag  
 720  
 accatctcca cactgcacga tgatgagatc ctgcccagca accccgctga cctcttccac  
 780  
 tggctgcca aggagcacat gtgtgtgctt gtctacctgg tgactgtgat gcactccatg  
 840  
 caggccggct acctggagaa ggcgagaaag tacacggaca aggccctcat gcagctggag  
 900  
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag  
 960  
 cacatcatca tgtgccgct tgtcacgggt cacaaggcca cggcgctgca ggagatc  
 1017

&lt;210&gt; 5626

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5626

Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg
1				5					10					15	
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
	50				55					60					
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70					75				80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
				85					90					95	
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100						105					110	
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe



115	120	125
Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys		
130	135	140
Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu		
145	150	155
Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met		
165	170	175
Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln		
180	185	190
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg		
195	200	205
Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln		
210	215	220
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln		
225	230	235
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala		
245	250	255
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr		
260	265	270
Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala		
275	280	285
Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met		
290	295	300
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu		
305	310	315
His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu		
325	330	335
Gln Glu Ile		

&lt;210&gt; 5627

&lt;211&gt; 1401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5627

```

nctctcacac tgtggaattc tctctatcag cctcaaagtc cagatttgga aagggagtct
60
cagcgagggg cagcagctgg cccaaccggg aggcagagcg gcaactgaac tctagccgga
120
aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgaccctca
180
catctgttcc tcgcgcccc aatggcttct getgectgct ccatggaccc catcgacagc
240
tttgagctcc tggatctcct gtttgaccgg caggacggca tcctgagaca cgtggagctg
300
ggcgagggct ggggtcacgt caaggaccag gtcttgccaa acccgcactc tgacgacttc
360
ctcagctcca tcctgggctc tggagactca ctgcccagct cccactctg gtccccgaa
420
ggcagtata gtggcatctc cgaagacctc ccctccgacc ccagggacac ccctccagc
480
agcggaccag ccacctcccc cgccggctgc catctgccc agcctggcaa ggggcctg
540

```

ctctctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa  
 600  
 cagcatcacc tgggggcctc ctacctctg cgacctgggg ctgggcactg tcaggagctg  
 660  
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcacctt gccactcag  
 720  
 ctgcccctca ctaagtacga ggagcgagt ctgaaaaaaa tccgccggaa aatccggaac  
 780  
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctggagact  
 840  
 cggtcctgtt gctgtccttt gccctcatca tcctccctc catcagccct tttggcccca  
 900  
 acaaaaccga gagccctggg gactttgcgc ctgtacgagt gttctccaga actttgcaca  
 960  
 acgatgctgc ctcccgcgtg gctgctgatg ctgtgccagg ctccgaggcc ccaggacccc  
 1020  
 gacccgaggc tgacacaacc cgagaagagt ctccaggaag ccccggggca gactggggct  
 1080  
 tccaggacac cgcgaaacctg accaattcga cggaggagct ggacaacgcc accctggctc  
 1140  
 tgaggaatgc aacagagggg ctgggccagg tcgccctgct ggactgggtg gcgcctgggc  
 1200  
 cgagcactgg ctccaggacgt gcagggctgg aggcggcggg agacgagctg tgagcccccac  
 1260  
 caggactatg ctcccaggcc cctctgcccc ggggtgcctt ggggatgctg cactggggcag  
 1320  
 ctaccacact ggggatggga cgtgaggcca agaccccagc agagatgcca gaatggggga  
 1380  
 ggcacagctc atagccacac a  
 1401

&lt;210&gt; 5628

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
1				5				10					15		
Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20					25					30			
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
	35				40						45				
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50				55					60					
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70				75						80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85				90							95	
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100				105						110		
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
		115				120					125				
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

```

      130              135              140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145              150              155              160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165              170              175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180              185              190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195              200              205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210              215              220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225              230              235              240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245              250              255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260              265              270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275              280              285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
      290              295

```

<210> 5629  
 <211> 428  
 <212> DNA  
 <213> Homo sapiens

```

<400> 5629
gtgcacgacc ccactgaatc atcccacaac catggatggg agacacactc agtctccttt
60
aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt
120
agccatcagg ggcagnctg ctattcaggt ctgggactgt gggactccag agcccatggt
180
ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg
240
tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcataattg tggaggatct
300
tccccattc tctgtaccc tctcttgagg ctcccagttc catctgagaa attatctact
360
ctgagaaatc gtcacaacac agcatgggtg tgagtgcagt ggcagaagcc tgtgcctggg
420
tgtatggg
428

```

<210> 5630  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

```

<400> 5630
Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
1          5          10          15
Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

```

<400> 5632  
Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly

1				5					10					15					
Ala	Gly	Ala	Gly	Ala	Gly	His	Leu	Thr	Pro	Gln	Ala	Ser	Pro	Thr	Ser				
			20						25					30					
Glu	Leu	Pro	Thr	Ala	Lys	Thr	Pro	Gly	Glu	Ala	Gly	Arg	Gly	Gly	Val				
		35					40					45							
Arg	Gly	Lys	Glu	Gly	Leu	Cys	Glu	Ser	Lys	Pro	His	Pro	Gln	Ser	Arg				
	50					55					60								
Ala	Glu	Thr	Gln	Val	Cys	Lys	Ser	His	Pro	Pro	Pro	Thr	Ser	Ser	Ser				
65					70					75					80				
Phe	Glu	Ala	Ser	Ser	Thr	Arg	Gly	Arg	Ala	Gly	Ala	Ala	Gln	Arg	Pro				
			85						90					95					
Glu	Lys	Gly	Lys	Pro	His	Arg	Arg	Lys	Leu	Lys	Ala	Ser	Val	Pro	Cys				
		100						105					110						
Val	Ser	Ala	Glu	Arg	Val	Asn	Gly	Pro	Lys	Gly	Ser	Ser	Leu	Gln	Thr				
	115						120				125								
Ala	Arg	Ile	His	Pro	Thr	Gly	Gly	His	Arg	Thr	Arg	Pro	Gly	Pro	Ser				
	130					135				140									
Ala	Ser	Val	Pro	Val	Gln	Pro	Thr	Pro	Val	Gln	Pro	Gly	Ala	Leu	Ser				
145					150				155					160					
Asp	Leu	Thr	Thr	Arg	Val	Pro	Ser	Thr	Cys	Val	His	Thr	Gln	Met	Gln				
			165					170					175						
Glu	Arg	Thr	His	Thr	Thr	Val													
			180																

&lt;210&gt; 5633

&lt;211&gt; 2181

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5633

gccaatgtcc ctgtggccac tcagctgaga ccgagggcga cctgggcagc tgcgggtgtc  
60  
tgtaacctcc gtgtcccaca tagatgccag gctctgcttc tgtgggttctg gaggtcatta  
120  
gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa  
180  
tgagcggggt ctgagtgtg gggccgctgg tctgctctgc ctggtgggat tctccagtgc  
240  
tggtttcatc tgtgccccag cccactctc accaacaagg agggcgtgaa aatgacaagg  
300  
aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg  
360  
gccctgtgtg agctgctgct ctgaggaagc ccagggctga ggtagctacc aggcggaggc  
420  
tggttttgga ggctccaca tcaggaatt gagcggtagg ggtttcagcc ttcacgttgg  
480  
tcgccgcact gtatgggaag tggggctctg ggtctgcttg ccagctctca ccgtcctctt  
540  
cctccccaaa gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcggat  
600  
ctggtggtca tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc  
660  
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggcggc  
720

cggtctttca gcgccatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc  
780  
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&lt;210&gt; 5634

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5634

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Leu Thr Val Arg Ser Leu Leu Asp Thr Arg Glu His Cys Leu Asn Glu
 20           25           30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
 35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
 50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
 65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
 85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
275          280          285
Glu

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&lt;210&gt; 5635

&lt;211&gt; 614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5635

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gcactcatca atggtgatga aaacctggcc tgccaaatat atgaaaacaa tcctcagcta
180

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 360  
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 420  
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 480  
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<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

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			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
	50					55					60				
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
65					70					75				80	
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
				85					90					95	
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
			100					105					110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
		115					120					125			
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
		130				135						140			
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
145					150					155				160	
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
				165					170					175	
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
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Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg				
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<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens



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 360  
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 420  
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 480  
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 660  
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 720  
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<210> 5638  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 5638  
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 20 25 30  
 Leu Thr Gly Ala Arg Trp Phe Cys Asp Pro Ser Gln Ala His Ala Pro  
 35 40 45  
 Leu Ala Gly Arg Leu Ala Arg Ala Pro Leu Trp Leu Ala Cys Gly Asp  
 50 55 60  
 Thr Trp Ala Leu Leu His Val Pro Thr Arg Ala Val Ala Gly Ser Lys  
 65 70 75 80  
 Glu Ala Gln Pro Arg Pro Ala Cys Val Asp Pro Ala Gly Leu Arg Ala  
 85 90 95  
 Pro Glu Leu Leu Thr Val Ser Glu Pro Gly Cys Pro Ala Pro Arg Arg  
 100 105 110  
 Pro Pro Ser Ser Cys Pro Ala Trp Asp Pro Ser Ala Val Cys Leu Leu  
 115 120 125  
 Asn Gln Gly Val

130

&lt;210&gt; 5639

&lt;211&gt; 2433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5639

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720  
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 2433

&lt;210&gt; 5640

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5640

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Ser	Ser	Arg	Leu	Ala	Ala	Gly	Pro	Thr	Phe	Gln	His	Phe	Leu	Lys	Ser
			20					25					30		
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
			35				40					45			
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
			50			55					60				
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
65				70					75					80	
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

85 90 95  
 Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu  
 100 105 110  
 Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg  
 115 120 125  
 Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met  
 130 135 140  
 Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp  
 145 150 155 160  
 Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala  
 165 170 175  
 Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp  
 180 185 190  
 Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr  
 195 200 205  
 Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr  
 210 215 220  
 Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala  
 225 230 235 240  
 Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu  
 245 250 255  
 Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu  
 260 265 270  
 Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr  
 275 280 285  
 Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu  
 290 295 300  
 Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser  
 305 310 315 320  
 Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu  
 325 330 335  
 Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser  
 340 345 350  
 Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr  
 355 360 365  
 Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu  
 370 375 380  
 Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His  
 385 390 395 400  
 Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe  
 405 410 415  
 Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu  
 420 425 430  
 Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu  
 435 440 445  
 Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val  
 450 455 460  
 Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala  
 465 470 475 480  
 Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro  
 485 490 495  
 Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala  
 500 505 510  
 Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

515
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525  
 Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu  
530
535
540

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<210> 5641
<211> 293
<212> DNA
<213> Homo sapiens
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120
caggtgggcg aggaggtgtg gctggctggg gcacccctgg catccctgga gagccaggtg
180
aggagggcag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagaccacc
240
agccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac ccg
293
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<210> 5642
<211> 87
<212> PRT
<213> Homo sapiens
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<400> 5642
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Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
          20          25          30
Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
          35          40          45
Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
          50          55          60
Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
65          70          75          80
Ser Pro Leu His Pro Thr Ala
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<210> 5643
<211> 1218
<212> DNA
<213> Homo sapiens
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aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
180
aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
240

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 840  
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&lt;210&gt; 5644

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5644

Trp	Glu	Gln	Asp	Phe	Gly	His	Pro	Val	Ser	Gln	Glu	Ser	Ser	Trp	Ser
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Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35					40					45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50					55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70					75				80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
				85					90					95	
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile



<210> 5648  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 5648  
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 His Pro  
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 <211> 345  
 <212> DNA  
 <213> Homo sapiens

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 gacccgagtc tccggcgag cgcggggcggc ttgctccgct cgcagggtcat ccacagcggg  
 180  
 cacttcatgg tgctgtcgcc gcacagcgac tcgctgcccc ggcgggcgca ccaggagggt  
 240  
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg  
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 agtgcttgag cctggcctac agtggcaagc tggggctctcc caagt  
 345

<210> 5650  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 5650  
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 Gln Thr Arg Thr Arg Thr Gln Thr Arg Arg Thr Arg Val Ser Gly Ala  
 20 25 30  
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 35 40 45  
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg  
 50 55 60  
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His  
 65 70 75 80  
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala  
 85 90 95  
 Gly Val Ser Gln



100

<210> 5651  
 <211> 615  
 <212> DNA  
 <213> Homo sapiens

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 gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacatacctt  
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 360  
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 420  
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 480  
 agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aagggttcga  
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<210> 5652  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 5652  
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 Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val  
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 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala  
 35 40 45  
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu  
 50 55 60  
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys  
 65 70 75 80  
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp  
 85 90 95  
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu  
 100 105 110  
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu  
 115 120 125  
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

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Val Lys Phe Ala Val Arg Glu Arg Tyr Pro Leu Asp His Ala Arg Ala		
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Ala Glu Pro		160

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 <211> 1439  
 <212> DNA  
 <213> Homo sapiens

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 1260

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<210> 5654  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<400> 5654  
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 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  
 35 40 45  
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala  
 50 55 60  
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu  
 65 70 75 80  
 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro  
 85 90 95  
 Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly  
 100 105 110  
 Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr  
 115 120 125  
 His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu  
 130 135 140  
 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys  
 145 150 155 160  
 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala  
 165 170 175  
 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe  
 180 185 190  
 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu  
 195 200 205  
 Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr  
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<210> 5655  
 <211> 3810  
 <212> DNA  
 <213> Homo sapiens

<400> 5655  
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 3810

&lt;210&gt; 5656

&lt;211&gt; 987

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5656

Asp	Leu	Leu	Glu	Glu	Asp	Glu	Leu	Leu	Glu	Gln	Lys	Phe	Gln	Glu	Ala
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Val	Gly	Gln	Ala	Gly	Xaa	Pro	Ser	Pro	Ser	Xaa	Ser	Lys	Ala	Glu	Leu
		20						25					30		
Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
	35					40					45				
Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
	50				55					60					
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
65			70					75						80	
Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
		85					90						95		
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
	100					105						110			
Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
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Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
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Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
145			150					155						160	
Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn	Val
		165					170						175		
Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
	180					185					190				
Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
	195				200						205				
Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
	210				215					220					
Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

225					230					235				240
Arg	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Asp	Arg	Glu	Leu	Lys	Lys
				245					250				255	
Pro	Pro	Pro	Arg	Pro	Thr	Ala	Pro	Lys	Pro	Leu	Leu	Pro	Arg	Arg
			260					265					270	
Glu	Ser	Glu	Ala	Val	Glu	Ala	Gly	Asp	Pro	Pro	Glu	Glu	Leu	Arg
		275					280				285			
Leu	Pro	Pro	Asp	Met	Val	Ala	Gly	Pro	Arg	Leu	Pro	Asp	Thr	Phe
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Gly	Ser	Ala	Thr	Pro	Leu	His	Phe	Pro	Pro	Ser	Pro	Phe	Pro	Ser
305					310					315				320
Thr	Gly	Pro	Gly	Pro	His	Tyr	Leu	Ser	Gly	Pro	Leu	Pro	Pro	Gly
				325					330					335
Tyr	Ser	Gly	Pro	Thr	Gln	Leu	Ile	Gln	Pro	Arg	Ala	Pro	Gly	Pro
			340					345					350	
Ala	Met	Pro	Val	Ala	Pro	Gly	Pro	Ala	Leu	Tyr	Pro	Ala	Pro	Ala
	355						360					365		
Thr	Pro	Glu	Leu	Gly	Leu	Val	Pro	Arg	Ser	Ser	Pro	Gln	His	Gly
	370					375					380			
Val	Ser	Ser	Pro	Tyr	Val	Gly	Val	Gly	Pro	Ala	Pro	Pro	Val	Ala
385					390					395				400
Leu	Pro	Ser	Ala	Pro	Pro	Pro	Gln	Phe	Ser	Gly	Pro	Glu	Leu	Ala
			405						410					415
Ala	Val	Arg	Pro	Ala	Thr	Thr	Thr	Val	Asp	Ser	Ile	Gln	Ala	Pro
			420					425					430	
Pro	Ser	His	Thr	Ala	Pro	Arg	Pro	Asn	Pro	Thr	Pro	Ala	Pro	Pro
	435						440					445		
Pro	Cys	Phe	Pro	Val	Pro	Pro	Pro	Gln	Pro	Leu	Pro	Thr	Pro	Tyr
	450				455						460			
Tyr	Pro	Ala	Gly	Ala	Lys	Gln	Pro	Ile	Pro	Ala	Gln	His	His	Phe
465					470					475				480
Ser	Gly	Ile	Pro	Thr	Gly	Phe	Pro	Ala	Pro	Arg	Ile	Gly	Pro	Gln
			485						490					495
Gln	Pro	His	Pro	Gln	Pro	His	Pro	Ser	Gln	Ala	Phe	Gly	Pro	Gln
			500					505					510	
Pro	Gln	Gln	Pro	Leu	Pro	Leu	Gln	His	Pro	His	Leu	Phe	Pro	Pro
	515						520					525		
Ala	Pro	Gly	Leu	Leu	Pro	Pro	Gln	Ser	Pro	Tyr	Pro	Tyr	Ala	Pro
	530					535					540			
Pro	Gly	Val	Leu	Gly	Gln	Pro	Pro	Pro	Pro	Leu	His	Thr	Gln	Leu
545					550					555				560
Pro	Gly	Pro	Ala	Gln	Asp	Pro	Leu	Pro	Ala	His	Ser	Gly	Ala	Leu
			565						570					575
Phe	Pro	Ser	Pro	Gly	Pro	Pro	Gln	Pro	Pro	His	Pro	Pro	Leu	Ala
			580					585					590	
Gly	Pro	Ala	Pro	Ser	Thr	Arg	Pro	Met	Gly	Pro	Gln	Ala	Ala	Pro
	595						600					605		
Thr	Ile	Arg	Gly	Pro	Ser	Ser	Ala	Gly	Gln	Ser	Thr	Pro	Ser	Pro
	610					615					620			
Leu	Val	Pro	Ser	Pro	Ala	Pro	Ser	Pro	Gly	Pro	Gly	Pro	Val	Pro
625					630					635				640
Arg	Pro	Pro	Ala	Ala	Glu	Pro	Pro	Pro	Cys	Leu	Arg	Arg	Gly	Ala
			645						650					655
Ala	Ala	Asp	Leu	Leu	Ser	Ser	Ser	Pro	Glu	Ser	Gln	His	Gly	Gly
														Thr

660				665				670							
Gln	Ser	Pro	Gly	Gly	Gly	Gln	Pro	Leu	Leu	Gln	Pro	Thr	Lys	Val	Asp
675				680				685							
Ala	Ala	Glu	Gly	Arg	Arg	Pro	Gln	Ala	Leu	Arg	Leu	Ile	Glu	Arg	Asp
690				695				700							
Pro	Tyr	Glu	His	Pro	Glu	Arg	Leu	Arg	Gln	Leu	Gln	Gln	Glu	Leu	Glu
705	710				715				720						
Ala	Phe	Arg	Gly	Gln	Leu	Gly	Asp	Val	Gly	Ala	Leu	Asp	Thr	Val	Trp
725				730				735							
Arg	Glu	Leu	Gln	Asp	Ala	Gln	Glu	His	Asp	Ala	Arg	Gly	Arg	Ser	Ile
740				745				750							
Ala	Ile	Ala	Arg	Cys	Tyr	Ser	Leu	Lys	Asn	Arg	His	Gln	Asp	Val	Met
755				760				765							
Pro	Tyr	Asp	Ser	Asn	Arg	Val	Val	Leu	Arg	Ser	Gly	Lys	Asp	Asp	Tyr
770	775				780										
Ile	Asn	Ala	Ser	Cys	Val	Glu	Gly	Leu	Ser	Pro	Tyr	Cys	Pro	Pro	Leu
785	790				795				800						
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805				810				815							
Met	Val	His	Glu	Gln	Lys	Val	Ser	Val	Ile	Val	Met	Leu	Val	Ser	Glu
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835				840				845							
Gly	Gln	Pro	Met	Val	His	Gly	Ala	Leu	Ser	Leu	Ala	Leu	Ser	Ser	Val
850	855				860										
Arg	Ser	Thr	Glu	Thr	His	Val	Glu	Arg	Val	Leu	Ser	Leu	Gln	Phe	Arg
865	870				875				880						
Asp	Gln	Ser	Leu	Lys	Arg	Ser	Leu	Val	His	Leu	His	Phe	Pro	Thr	Trp
885				890				895							
Pro	Glu	Leu	Gly	Leu	Pro	Asp	Ser	Pro	Ser	Asn	Leu	Leu	Arg	Phe	Ile
900				905				910							
Gln	Glu	Val	His	Ala	His	Tyr	Leu	His	Gln	Arg	Pro	Leu	His	Thr	Pro
915				920				925							
Ile	Ile	Val	His	Cys	Ser	Ser	Gly	Val	Gly	Arg	Thr	Gly	Ala	Phe	Ala
930	935				940										
Leu	Leu	Tyr	Ala	Ala	Val	Gln	Glu	Val	Glu	Ala	Gly	Asn	Gly	Ile	Pro
945	950				955				960						
Glu	Leu	Pro	Gln	Leu	Val	Arg	Arg	Met	Arg	Gln	Gln	Arg	Lys	His	Met
965				970				975							
Leu	Gln	Glu	Lys	Leu	His	Leu	Arg	Xaa	Leu	Leu					
980				985											

&lt;210&gt; 5657

&lt;211&gt; 1020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5657

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120

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180



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 720  
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 ggctccggag tgaagctgca agcggagaaa tcacggccgg tgatgcaggc ctgagtgtgt  
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&lt;210&gt; 5658

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5658

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His	Glu	Lys	Lys	Lys	Asp	Thr	Ala	Ala	Ser	Gly	Tyr	Gly	Thr	Gln	Asn
			20					25					30		
Ile	Arg	Leu	Ser	Arg	Asp	Ala	Val	Lys	Asp	Phe	Asp	Cys	Cys	Cys	Leu
		35					40					45			
Ser	Leu	Gln	Pro	Cys	His	Asp	Pro	Val	Val	Thr	Pro	Asp	Gly	Tyr	Leu
	50					55					60				
Tyr	Glu	Arg	Glu	Ala	Ile	Leu	Glu	Tyr	Ile	Leu	His	Gln	Lys	Lys	Glu
65					70					75				80	
Ile	Ala	Arg	Gln	Met	Lys	Ala	Tyr	Glu	Lys	Gln	Arg	Gly	Thr	Arg	Arg
			85					90					95		
Glu	Glu	Gln	Lys	Glu	Leu	Gln	Arg	Ala	Ala	Ser	Gln	Asp	His	Val	Arg
			100					105					110		
Gly	Phe	Leu	Glu	Lys	Glu	Ser	Ala	Ile	Val	Ser	Arg	Pro	Leu	Asn	Pro
		115					120					125			
Phe	Thr	Ala	Lys	Ala	Leu	Ser	Gly	Thr	Ser	Pro	Asp	Asp	Val	Gln	Pro
	130					135					140				
Gly	Pro	Ser	Val	Gly	Pro	Pro	Ser	Lys	Asp	Lys	Asp	Lys	Val	Leu	Pro

145		150		155		160									
Ser	Phe	Trp	Ile	Pro	Ser	Leu	Thr	Pro	Glu	Ala	Lys	Ala	Thr	Lys	Leu
				165					170					175	
Glu	Lys	Pro	Ser	Arg	Thr	Val	Thr	Cys	Pro	Met	Ser	Gly	Lys	Pro	Leu
			180					185					190		
Arg	Met	Ser	Asp	Leu	Thr	Pro	Val	His	Phe	Thr	Pro	Leu	Asp	Ser	Ser
		195					200					205			
Val	Asp	Arg	Val	Gly	Leu	Ile	Thr	Arg	Ser	Glu	Arg	Tyr	Val	Cys	Ala
	210					215					220				
Val	Thr	Arg	Asp	Ser	Leu	Ser	Asn	Ala	Thr	Pro	Cys	Ala	Val	Leu	Arg
225					230					235					240
Pro	Ser	Gly	Ala	Val	Thr	Leu	Glu	Cys	Val	Glu	Lys	Leu	Ile	Arg	
			245					250					255		
Lys	Asp	Met	Val	Asp	Pro	Val	Thr	Gly	Asp	Lys	Leu	Thr	Asp	Arg	Asp
		260						265					270		
Ile	Ile	Val	Leu	Gln	Arg	Gly	Gly	Thr	Gly	Phe	Ala	Gly	Ser	Gly	Val
		275					280					285			
Lys	Leu	Gln	Ala	Glu	Lys	Ser	Arg	Pro	Val	Met	Gln	Ala			
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&lt;210&gt; 5659

&lt;211&gt; 1263

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5659

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120
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180
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240
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300
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420
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480
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aagctgaacc tgttgataac tgggaaaatt gtagatcatg gcaatgggac atttagtggt
600
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720
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780
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840

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 1260  
 att  
 1263

<210> 5660  
 <211> 253  
 <212> PRT  
 <213> Homo sapiens

<400> 5660  
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 Lys Asp Leu Ser Ile Ser Arg Leu Leu Ser Gln Thr Phe Arg Gly Lys  
 35 40 45  
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr  
 50 55 60  
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln  
 65 70 75 80  
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys  
 85 90 95  
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr  
 100 105 110  
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn  
 115 120 125  
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn  
 130 135 140  
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu  
 145 150 155 160  
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys  
 165 170 175  
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys  
 180 185 190  
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His  
 195 200 205  
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile  
 210 215 220  
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp  
 225 230 235 240  
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

<210> 5661  
 <211> 578  
 <212> DNA  
 <213> Homo sapiens

<400> 5661  
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 120  
 ataaccagtg gcacggcaag gaccagcag gaagcaccag ccactggccc cgacctcccg  
 180  
 caccaggac ctgacgggca cttagacaca cacagtggcc tgagctccaa ctccagcatg  
 240  
 accacgcggg agcttcagca gtactggcag aaccagaaat gccgctggaa gcacgtcaaa  
 300  
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 360  
 gggaaatcaa ggcttgagga gatgacttat ccagggtcac gtggcgagac agggacagca  
 420  
 ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca  
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<210> 5662  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 5662  
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 Cys Leu Gly Ala Cys Lys Ser Arg Ala Pro Trp Glu Pro Trp Cys Met  
 20 25 30  
 Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala  
 35 40 45  
 Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr  
 50 55 60  
 His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln  
 65 70 75 80  
 Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu  
 85 90 95  
 Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe  
 100 105 110  
 Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg  
 115 120 125  
 Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln  
 130 135 140  
 Ser Asp Met Leu

145

<210> 5663  
 <211> 857  
 <212> DNA  
 <213> Homo sapiens

<400> 5663  
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 120  
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 180  
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 240  
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 360  
 atccagaggt agctgggtgc tatctagatc aggaatggag aacttcttgt agtacttctt  
 420  
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 480  
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 540  
 gaagatagga ttggcattgc tttccttgat gagttcaggc cccagggttc ctgctcctag  
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 660  
 acgccacttt ctcaacaagta gttcactcgt cttctcgtca tattcttcag ccatttcctt  
 720  
 gccgtctggg aataaatagt gaaccttctt tctcccgctc tgcagcagcg cagtcttctg  
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 857

<210> 5664  
 <211> 203  
 <212> PRT  
 <213> Homo sapiens

<400> 5664  
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 1 5 10 15  
 Ala Leu Leu Gln Asp Gly Arg Arg Lys Val His Tyr Leu Phe Pro Asp  
 20 25 30  
 Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu  
 35 40 45  
 Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp  
 50 55 60  
 Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195          200

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<210> 5665  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

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<400> 5665
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120
cagcggccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc
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240
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300
cccgggcctt cccgcaggt ggagcgcgtg tcgcacccgc tgctgcagca gcagtatgag
360
ctgtaccggg agcgctgtgt gcagcgatgc gagcggcgcc cggaggagca ggtgctgtac
420
cacggcacga cggcaccggc agtgcctgac atctgcgccc acggcttcaa ccgcagcttc
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531

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<210> 5666  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

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<400> 5666
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1          5          10          15
Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
          20          25          30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

```

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      35              40              45
Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly
      50              55              60
Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
      65              70              75

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<210> 5667  
 <211> 858  
 <212> DNA  
 <213> Homo sapiens

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 120  
 tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct  
 180  
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaaattca  
 240  
 aacatgctgg atgttcaggg aggtgctcac aaaaaaaggg cacgccgcag ctctctgctt  
 300  
 aatgccaaaga agctatatga ggatgccccaa atggcaagga aggtgaagca gtatctttcc  
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 480  
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 540  
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<210> 5668  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<400> 5668  
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 1 5 10 15  
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 20 25 30  
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

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<400> 5669
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gccatgatgc gcagctccat agagaggggc aaatgggtct tcttcagaa ctgccacctg
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900
aaatcatctt ctgcaggcag ccagggccgg gaggagatag tggaggacgt caccctaaac
960

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&lt;210&gt; 5670

&lt;211&gt; 591

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
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Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
			20					25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
	50					55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75				80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85					90					95		
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
		100					105						110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
	115					120						125			
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

	130					135					140					
Leu 145	Ser	Leu	Cys	Leu	Phe 150	His	Gly	Asn	Ala	Leu 155	Glu	Arg	Arg	Lys	Phe 160	
Gly	Pro	Leu	Gly	Phe 165	Asn	Ile	Pro	Tyr	Glu 170	Phe	Thr	Asp	Gly	Asp	Leu 175	
Arg	Ile	Cys	Ile	Ser 180	Gln	Leu	Lys	Met	Phe 185	Leu	Asp	Glu	Tyr	Asp	Asp 190	
Ile	Pro	Tyr	Lys	Val 195	Leu	Lys	Tyr	Thr	Ala 200	Gly	Glu	Ile	Asn	Tyr	Gly 205	
Gly	Arg	Val	Thr	Asp 210	Asp	Trp	Asp	Arg	Arg 215	Cys	Ile	Met	Asn	Ile	Leu 220	
Glu 225	Asp	Phe	Tyr	Asn 230	Pro	Asp	Val	Leu	Ser 235	Pro	Glu	His	Ser	Tyr	Ser 240	
Ala	Ser	Gly	Ile	Tyr 245	His	Gln	Ile	Pro	Pro 250	Thr	Tyr	Asp	Leu	His	Gly 255	
Tyr	Leu	Ser	Tyr	Ile 260	Lys	Ser	Leu	Pro	Leu 265	Asn	Asp	Met	Pro	Glu	Ile 270	
Phe	Gly	Leu	His	Asp 275	Asn	Ala	Asn	Ile	Thr 280	Phe	Ala	Gln	Asn	Glu	Thr 285	
Phe	Ala	Leu	Leu	Gly 290	Thr	Ile	Ile	Gln	Leu 295	Gln	Pro	Lys	Ser	Ser	Ser 300	
Ala 305	Gly	Ser	Gln	Gly 310	Arg	Glu	Glu	Ile	Val 315	Glu	Asp	Val	Thr	Gln	Asn 320	
Ile	Leu	Leu	Lys	Val 325	Pro	Glu	Pro	Ile	Asn 330	Leu	Gln	Trp	Val	Met	Ala 335	
Lys	Tyr	Pro	Val	Leu 340	Tyr	Glu	Glu	Ser	Met 345	Asn	Thr	Val	Leu	Val	Gln 350	
Glu	Val	Ile	Arg	Tyr 355	Asn	Arg	Leu	Leu	Gln 360	Val	Ile	Thr	Gln	Thr	Leu 365	
Gln	Asp	Leu	Leu	Lys 370	Ala	Leu	Lys	Gly	Leu 375	Val	Val	Met	Ser	Ser	Gln 380	
Leu 385	Glu	Leu	Met	Ala 390	Ala	Ser	Leu	Tyr	Asn 395	Asn	Thr	Val	Pro	Glu	Leu 400	
Trp	Ser	Ala	Lys	Ala 405	Tyr	Pro	Ser	Leu	Lys 410	Pro	Leu	Ser	Ser	Trp	Val 415	
Met	Asp	Leu	Leu	Gln 420	Arg	Leu	Asp	Phe	Leu 425	Gln	Ala	Trp	Ile	Gln	Asp 430	
Gly	Ile	Pro	Ala	Val 435	Phe	Trp	Ile	Ser	Gly 440	Phe	Phe	Phe	Pro	Gln	Ala 445	
Phe	Leu	Thr	Gly	Thr 450	Leu	Gln	Asn	Phe	Ala 455	Arg	Lys	Phe	Val	Ile	Ser 460	
Ile 465	Asp	Thr	Ile	Ser 470	Phe	Asp	Phe	Lys	Val 475	Met	Phe	Glu	Ala	Pro	Ser 480	
Glu	Leu	Thr	Gln	Arg 485	Pro	Gln	Val	Gly	Cys 490	Tyr	Ile	His	Gly	Leu	Phe 495	
Leu	Glu	Gly	Ala	Arg 500	Trp	Asp	Pro	Glu	Ala 505	Phe	Gln	Leu	Ala	Glu	Ser 510	
Gln	Pro	Lys	Glu	Leu 515	Tyr	Thr	Glu	Met	Ala 520	Val	Ile	Trp	Leu	Leu	Pro 525	
Thr	Pro	Asn	Arg	Lys 530	Ala	Gln	Asp	Gln	Asp 535	Phe	Tyr	Leu	Cys	Pro	Ile 540	
Tyr 545	Lys	Thr	Leu	Thr 550	Arg	Ala	Gly	Thr	Leu 555	Ser	Thr	Thr	Gly	His	Ser 560	
Thr	Asn	Tyr	Val	Ile	Ala	Val	Glu	Ile	Pro	Thr	His	Gln	Pro	Gln	Arg	

BNSDOCID: <WO 0058473A2 | >

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys  
                     85                    90                    95  
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro  
                     100                    105                    110  
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly  
                     115                    120                    125  
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val  
                     130                    135                    140  
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp  
 145                    150                    155                    160  
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro  
                     165                    170                    175  
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu  
                     180                    185                    190  
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala  
                     195                    200                    205  
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly  
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&lt;210&gt; 5673

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5673

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 60  
 gcagaaatca atattttttgt ttgaaagatg cagtcattgct aattttcactt ttggctaaaa  
 120  
 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag  
 180  
 tgagctgggc tctaacttca ctcaaaaatt tatagtacag ctaagaaggc cagtctgtcc  
 240  
 atgaaaggga gccgagacaa gacgagggcg gcctcttcca ggctgtgcc aagtgtcctt  
 300  
 ggggtcccg catggtccac acttctgcag catccgcaga acatgtggcc gggctctgcc  
 360  
 cagcagcagg gacagccaag tgggaggcag gcatggtgca cacctgggga ggccctgggt  
 420  
 gcagaagcag cccacagta gcagcccat ccagaggaag accactccgg agggccacag  
 480  
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 540  
 acaggaatgc agggacgttc tgcccctagg tcagcctctt catccgcctg ttgtgcttcg  
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 660  
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 cctgggtatc tgcctcagaa agggctggca ggcttgtctg caggtgcagt gctgtgcctt  
 780  
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 840

gccagactga gcagctcttc tctgcggggg aagagggttct tgcgcttctg agcaccaatg  
 900  
 catctttctaa cagctccatc ttcttgctga actgcacttc taaaatgggg ataacctctg  
 960  
 gcatcttggc agatatcaaa cgataggcca tgtctggctt tccaataaac cgctggcgga  
 1020  
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 1080  
 gcatgagcaa agaactggag tcatgtattt ccaacccaga cacaaggacg gtgagcctcc  
 1140  
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 1200  
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 1279

&lt;210&gt; 5674

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
1			5						10				15		
Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25				30			
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
			35				40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55				60					
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
65					70					75					80
Gln															

&lt;210&gt; 5675

&lt;211&gt; 1074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5675

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 ccctgagctc ccaccgagg cttaggccca aggggcctct tccaggctga gggcctgctg  
 120  
 gggctgggcc aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc  
 180  
 cgggtgtaaca tggcaccgag gttggggcca cagcaatgtg tgggacggtg ggggtgggctg  
 240  
 gggcccttgg ctccaagcat tagttctcca agctctggtc cgttctccta cctccttcaa  
 300  
 ggggcaccag ggctacaagg tggtagttga gtattggggc ccgactcctg gggcactgga  
 360

gtggtctcta ggcccagagg cccaaggaga gggctgggtt tctgggagag tgctggctct  
 420  
 tcctctctgg gcttggccat cttgacagct tcatcgtagg aggggtggagg ctccgggggtg  
 480  
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 540  
 aaccgcatgc ccagtgggta ctgcacggag ctgtaggagg tcacagtgt gtgtacaggg  
 600  
 ctgtcactgt ccatagggat gactgccacg tcgcagggt gccgtgctgg tggcagatgt  
 660  
 ggctgggcct gtgcctgctt ccggaggcag cagaaccgga cacaaccagc tgtgacacca  
 720  
 cacagcagaa gcaggaggac cgccagcagg atgagcctag gagagcaagg ctctaccact  
 780  
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 840  
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 900  
 agagcctggc ctcgggctgc tgggcctgcc ctggctatct ctctgggct ggccaggggt  
 960  
 ggccttgggc tcaactcccag gactcgtgt cctcagcgag tgccccactg ctgagcggga  
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 1074

<210> 5676  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 5676  
 Glu Val Thr Val Leu Cys Thr Gly Leu Ser Leu Ser Ile Gly Met Thr  
 1 5 10 15  
 Ala Thr Ser Gln Gly Cys Arg Ala Gly Gly Arg Cys Gly Trp Ala Cys  
 20 25 30  
 Ala Cys Phe Arg Arg Gln Gln Asn Arg Thr Gln Pro Ala Val Thr Pro  
 35 40 45  
 His Ser Arg Ser Arg Arg Thr Ala Ser Arg Met Ser Leu Gly Glu Gln  
 50 55 60  
 Gly Ser Thr Thr Gly Leu Thr Leu Gly His Arg Ala Pro Ala Pro Trp  
 65 70 75 80  
 Gly Met Ser Trp His Asn His Arg Arg Gln Val Asn Arg Ile Lys Ser  
 85 90 95  
 Arg Gln Cys Leu Ser Met Ser Glu Thr Ala Val Ala Arg Ala Trp Pro  
 100 105 110  
 Arg Ala Ala Gly Pro Ala Leu Ala Ile Ser Pro Gly Leu Ala Arg Gly  
 115 120 125  
 Gly Leu Gly Leu Thr Pro Arg Thr Arg Cys Pro Gln Arg Val Pro His  
 130 135 140  
 Cys  
 145

<210> 5677  
 <211> 477

<212> DNA  
<213> Homo sapiens

<400> 5677  
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aaaaggacac tgggtgaagta gcggtagcac tctccacgt tgcccaaggg gggtgctggt  
120  
agggaaagca agatgcagca gtgaggccct ctctggtatc cattcattca cttcactcaa  
180  
cagctgttta tgaccatgag caatacaagc cttgtgaaga tcctggagca gggcacaagc  
240  
cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca  
300  
gccgcgctg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca  
360  
ccagctggag aagaccacca atgctgagat gaggaggtg ctggctgagc tgctggagct  
420  
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477

<210> 5678  
<211> 151  
<212> PRT  
<213> Homo sapiens

<400> 5678  
Met Ala Ser Leu Arg Leu Cys Ser Gly His Pro Ser Ser Ser Ser Ser  
1 5 10 15  
Ala Ser Thr Ser Leu Ile Ser Ala Leu Val Val Phe Ser Ser Trp Cys  
20 25 30  
Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly  
35 40 45  
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe  
50 55 60  
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His  
65 70 75 80  
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn  
85 90 95  
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr  
100 105 110  
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln  
115 120 125  
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro  
130 135 140  
Leu Gln Arg Gly Thr Ala Ala  
145 150

<210> 5679  
<211> 665  
<212> DNA  
<213> Homo sapiens

<400> 5679

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 gggaggatct accatgaaga aggtcaagaa gaaaagggtca gaggccagac gccaccggac  
 120  
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca  
 180  
 ccacagcagc ctagtctctga atccacacca cagcagccta gccctgaatc cacaccacag  
 240  
 cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcacccgaa  
 300  
 atccgcccgt cctcttgctg ccttttatct ccagatgcta acgtgaaggc agccctcaa  
 360  
 tccaggaaaag cagaaaatct tcaagaaaac cctccagtca tcgtaacgcg tgcctccaa  
 420  
 gccctcgga ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa  
 480  
 tccttgtaga caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagttg  
 540  
 ataggtgatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc  
 600  
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 660  
 aaaaa  
 665

<210> 5680  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 5680  
 Val Gly Arg Ile Tyr His Glu Glu Gly Gln Glu Glu Lys Val Arg Gly  
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 Gln Thr Pro Pro Asp Ser Thr Ser Gln His Ala Gly Ser Asn Ser Thr  
 20 25 30  
 Ser Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu  
 35 40 45  
 Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser  
 50 55 60  
 Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro  
 65 70 75 80  
 Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val  
 85 90 95  
 Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro  
 100 105 110  
 Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val  
 115 120 125  
 Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu  
 130 135 140

<210> 5681  
 <211> 1402  
 <212> DNA  
 <213> Homo sapiens



<400> 5681  
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 120  
 tagacattga tggaagcaga aaccaaaact cttcccttgga agaattgcac catcctttca  
 180  
 gagggctctc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc  
 240  
 gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc  
 300  
 ttccacaagt caggtgcttt ggaggggacag cctcgaggct actgttttgt taactttgaa  
 360  
 actaagcagg aagcagagca agccatccag tgtctcaatg gcaagttggc cctgtccaag  
 420  
 aagctggtgg tgcgatgggc acatgctcaa gtaaagagat atgatcataa caagaatgat  
 480  
 aagattcttc caatcagtct cgagccatcc tcaagcactg agcctactca gtctaacctc  
 540  
 agtgtcactg caaagataaa agccattgaa gcaaaactga aaatgatggc ggaaaatcct  
 600  
 gatgcagagt atccagcagc gcctgtttat tcctacttta agccaccaga taaaaaaagg  
 660  
 actactccat attctagaac agcatggaaa tctcgaagat gatggttgtg aattactgta  
 720  
 gcagcaaaaag caaattggtc tccacacctc aaatcgtctg cctgtgtact ttgtagatgt  
 780  
 gaatgggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg  
 840  
 gatgtttctta tggatgtttc ttccctaaac tatgtatgga attgagcatc atccagaata  
 900  
 aatagcgttg tatcccaaatt tgtgatttga accctgggat gctctaattg gctgggtggg  
 960  
 ttggatttgt aactccagaa acattctata gtgtgccaga gcaaaaggca aatacacaaa  
 1020  
 atattattta aatcaggaaa ctaaaaatat taacatctat taaaaaattg agcatttttc  
 1080  
 tacgtcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag  
 1140  
 acagatttta aatcatgttc agaactgttg ttccagaatt tactacggca atccctccaa  
 1200  
 ctggactgaa aaagagaaag ttcttggaac aaaggagctg attctttgaa caaatgttgt  
 1260  
 agtaatctgt ttaagaatta tgcttattgt ttcaaaatcc caactaggaa aacatgggtg  
 1320  
 atatcttaaa attgtttgtg ttgacaaaac tagaatcaaa tttaacattt tataccacat  
 1380  
 cacaagttct atttgggata tt  
 1402

<210> 5682  
 <211> 190  
 <212> PRT

<213> Homo sapiens

<400> 5682

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Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
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Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
          20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
          35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
          50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
          85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
          100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
          115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
          130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
          165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
          180          185          190

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<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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cgcaggggctg acctgtactg gtgagtaagc attagccatg ggacgcacac aatccagcca
120
atgcttttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tggttaaaag tagggaaata cagtgttcca gggcatagga atggtgctct
240
gggtagaaaa gtttattttg ctggtgggag gcaggttttg ttaataaagc tttgaaatac
300
acaaatttca ttctggatgc tgatgctg
328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

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Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

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      1             5             10             15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20             25             30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35             40             45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50             55             60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65             70             75             80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85             90             95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685  
 <211> 604  
 <212> DNA  
 <213> Homo sapiens

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<400> 5685
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60
ctggcctacg agtctgacgg gatcgtggtt tccaacgaca cataccgtga cctccaaggc
120
gagcggcagg agtggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggccctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttgcggggtc ttggctccag gcagctttga gaggtagacg gatagctcac cacataggag
360
aaatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc cagggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
540
cgacttcagg gagggagttc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
600
atcc
604

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<210> 5686  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

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<400> 5686
Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1             5             10             15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20             25             30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

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35 40 45  
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val  
 50 55 60  
 Pro Ser Gln Arg Pro  
 65

<210> 5687

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5687

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<211> 109

<212> PRT

<213> Homo sapiens

<400> 5688

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<211> 1897

<212> DNA

<213> Homo sapiens

<400> 5689

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<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

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<210> 5691

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<212> DNA

<213> Homo sapiens

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&lt;210&gt; 5696

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5696

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Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
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Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
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&lt;210&gt; 5697

&lt;211&gt; 3362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5697

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<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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Trp Arg Val Arg Arg	Leu Val Arg His Gly Thr	Gly Pro Ala Gly Trp		
145	150	155	160	
Gln Leu Val Gly	Leu Ala Leu Cys Leu Met Leu	Val Gln Val Ile Ile		
	165	170	175	
Ala Val Glu Trp	Leu Val Leu Thr Val Leu Arg Asp Thr	Arg Pro Ala		
	180	185	190	
Cys Ala Tyr Glu	Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met			
	195	200	205	
Val Leu Leu Val	Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly			
	210	215	220	
Lys Phe Lys Arg Trp	Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala			
225	230	235	240	
Phe Leu Ser Val	Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe			
	245	250	255	
Gly Asn Val Lys	Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu			
	260	265	270	
Ala Ile Thr Leu	Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala			
	275	280	285	
Ile Pro Glu Ile	His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr			
	290	295	300	
Pro Asn Tyr Phe	Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe			
305	310	315	320	
Glu Glu Asp Val	Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe			
	325	330	335	
Ser Met Asp Glu	His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn			
	340	345	350	
Gly Ser Leu Gly	Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser			
	355	360	365	
Ala Pro Phe Arg	Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val			
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Leu Asn Gly Gly	Thr Ile Pro Thr Ala Pro Pro Ser His Thr Gly Arg			
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His Leu Trp				

<210> 5699  
 <211> 1565  
 <212> DNA  
 <213> Homo sapiens

<400> 5699  
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 120  
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 180  
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 240  
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 300  
 cagttgagat ataaacgagg gaagaggtga agctttcagg aagccagaga gccctgccc  
 360

gtcagggtttc ctgaggaagg caggggtgct ctatgctcat cagtcattca agcttctcag  
 420  
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 1200  
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 1320  
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 1565

&lt;210&gt; 5700

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5700

Met	Val	Ala	Ile	Val	Gln	Leu	Gly	Pro	Glu	Trp	His	Gly	Met	Leu	Tyr
1				5				10					15		
Ser	Gln	Ala	Asp	Ser	Lys	Lys	Lys	Ser	Asn	Leu	Met	Met	Ser	Leu	Phe
			20					25					30		
Glu	Pro	Gly	Pro	Glu	Pro	Leu	Pro	Trp	Leu	Gly	Lys	Met	Ala	Gln	Leu

[illegible]

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<210> 5701
<211> 1885
<212> DNA
<213> Homo sapiens
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780

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 960  
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 1860  
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 1885

&lt;210&gt; 5702

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5702

Met	Asp	Thr	Leu	Glu	Glu	Val	Thr	Trp	Ala	Asn	Gly	Ser	Thr	Ala	Leu
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Pro	Pro	Pro	Leu	Ala	Pro	Asn	Ile	Ser	Val	Pro	His	Arg	Cys	Leu	Leu
			20					25					30		
Leu	Leu	Tyr	Glu	Asp	Ile	Gly	Thr	Ser	Arg	Val	Arg	Tyr	Trp	Asp	Leu
		35				40						45			
Leu	Leu	Leu	Ile	Pro	Asn	Val	Leu	Phe	Leu	Ile	Phe	Leu	Leu	Trp	Lys
	50				55				60						
Leu	Pro	Ser	Ala	Arg	Ala	Lys	Ile	Arg	Ile	Thr	Ser	Ser	Pro	Ile	Phe



65				70					75				80
Ile	Thr	Phe	Tyr	Ile	Leu	Val	Phe	Val	Val	Ala	Leu	Val	Gly
				85					90				95
Arg	Ala	Val	Val	Ser	Met	Thr	Val	Ser	Thr	Ser	Asn	Ala	Ala
				100				105				110	
Ala	Asp	Lys	Ile	Leu	Trp	Glu	Ile	Thr	Arg	Phe	Phe	Leu	Leu
		115				120					125		
Glu	Leu	Ser	Val	Ile	Ile	Leu	Gly	Leu	Ala	Phe	Gly	His	Leu
	130					135				140			
Lys	Ser	Ser	Ile	Lys	Arg	Val	Leu	Ala	Ile	Thr	Thr	Val	Leu
145				150				155					160
Ala	Tyr	Ser	Val	Thr	Gln	Gly	Thr	Leu	Glu	Ile	Leu	Tyr	Pro
			165				170					175	
His	Leu	Ser	Ala	Glu	Asp	Phe	Asn	Ile	Tyr	Gly	His	Gly	Gly
	180					185					190		
Phe	Trp	Leu	Val	Ser	Ser	Cys	Phe	Phe	Phe	Leu	Val	Tyr	Ser
	195					200					205		
Val	Ile	Leu	Pro	Lys	Thr	Pro	Leu	Lys	Glu	Arg	Ile	Ser	Leu
	210				215					220			
Arg	Arg	Ser	Phe	Tyr	Val	Tyr	Ala	Gly	Ile	Leu	Ala	Leu	Leu
225				230				235					240
Leu	Gln	Gly	Leu	Gly	Ser	Val	Leu	Leu	Cys	Phe	Asp	Ile	Ile
			245					250				255	
Leu	Cys	Cys	Val	Asp	Ala	Thr	Thr	Phe	Leu	Tyr	Phe	Ser	Phe
	260				265						270		
Pro	Leu	Ile	Tyr	Val	Ala	Phe	Leu	Arg	Gly	Phe	Phe	Gly	Ser
	275				280					285			
Lys	Ile	Leu	Phe	Xaa	Leu	Gln	Met	Pro	Ser	Gly	Arg	Asp	Arg
	290				295					300			
Arg	Cys	Thr	Pro	Thr	Pro	Ala	Leu	Arg	Cys	Gly	Pro	Ala	Gly
305				310				315					320
Gly	Gly	Cys	Arg	Gly	Cys	Trp	Gly	Leu	Ser	Cys	Gln	Leu	Leu
			325					330				335	
Ala	Val	Arg	Leu	Cys	Arg	Arg	Gly	Gly	Leu	Pro	Gly		
			340					345					

&lt;210&gt; 5703

&lt;211&gt; 1496

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5703

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360

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&lt;210&gt; 5704

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5704

Ser	Arg	Thr	Thr	Tyr	Lys	Gly	Lys	Ser	Ser	Phe	Gln	Thr	Tyr	Ser	Asp
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Tyr	Leu	Arg	Trp	Glu	Ser	Phe	Leu	Gln	Gln	Leu	Gln	Ala	Leu	Pro	
			20					25				30			
Glu	Gly	Ser	Val	Leu	Arg	Arg	Gly	Phe	Gln	Thr	Cys	Glu	His	Trp	Lys
		35					40				45				
Gln	Ile	Phe	Met	Glu	Ile	Val	Gly	Val	Gln	Ser	Ala	Leu	Cys	Gly	Leu
	50					55					60				
Val	Leu	Ser	Leu	Leu	Ile	Cys	Val	Ala	Ala	Val	Ala	Val	Phe	Thr	Thr

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His Ile Leu Leu Leu Leu Pro Val Leu Leu Ser Ile Leu Gly Ile Val
          85          90          95
Cys Leu Val Val Thr Ile Met Tyr Trp Ser Gly Trp Glu Met Gly Ala
          100          105          110
Val Glu Ala Ile Ser Leu Ser Ile Leu Val Gly Ser Ser Val Asp Tyr
          115          120          125
Cys Val His Leu Val Glu Gly Tyr Leu Leu Ala Gly Glu Asn Leu Pro
          130          135          140
Pro His Gln Ala Glu Asp Ala Arg Thr Gln Arg Gln Trp Arg Thr Leu
145          150          155          160
Glu Ala Val Arg His Val Gly Val Ala Ile Val Ser Ser Ala Leu Thr
          165          170          175
Thr Val Ile Ala Thr Val Pro Leu Phe Phe Cys Ile Ile Ala Pro Phe
          180          185          190
Ala Lys Phe Gly Lys Ile Val Ala Leu Asn Thr Gly Val Ser Ile Leu
          195          200          205
Tyr Thr Leu Thr Val Ser Thr Ala Leu Leu Gly Ile Met Ala Pro Ser
          210          215          220
Ser Phe Thr Arg Thr Arg Thr Ser Phe Leu Lys Ala Leu Gly Ala Val
225          230          235          240
Leu Leu Ala Gly Ala Leu Gly Leu Gly Ala Cys Leu Val Leu Leu Gln
          245          250          255
Ser Gly Tyr Lys Ile Pro Leu Pro Ala Gly Ala Ser Leu
          260          265

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&lt;210&gt; 5705

&lt;211&gt; 768

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5705

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660

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 768

<210> 5706  
 <211> 202  
 <212> PRT  
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<400> 5706  
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 35 40 45  
 His Thr Asn Arg Thr Thr Ser Trp Ile Asp Pro Arg Asp Arg Tyr Thr  
 50 55 60  
 Lys Pro Leu Thr Phe Ala Asp Cys Ile Ser Asp Glu Leu Pro Leu Gly  
 65 70 75 80  
 Trp Glu Glu Ala Tyr Asp Pro Gln Val Gly Asp Tyr Phe Ile Asp His  
 85 90 95  
 Asn Thr Lys Thr Thr Gln Ile Glu Asp Pro Arg Val Gln Trp Arg Arg  
 100 105 110  
 Glu Gln Glu His Met Leu Lys Asp Tyr Leu Val Val Ala Gln Glu Ala  
 115 120 125  
 Leu Ser Ala Gln Lys Glu Ile Tyr Gln Val Lys Gln Gln Arg Leu Glu  
 130 135 140  
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 145 150 155 160  
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<210> 5707  
 <211> 6988  
 <212> DNA  
 <213> Homo sapiens

<400> 5707  
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 1142

&lt;210&gt; 5712

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5712

Met	Trp	Gln	Lys	Tyr	Ala	Gly	Ser	Arg	Arg	Ser	Met	Pro	Leu	Gly	Ala
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Arg	Ile	Leu	Phe	His	Gly	Val	Phe	Tyr	Ala	Gly	Gly	Phe	Ala	Ile	Val
			20					25					30		
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40					45			

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly  
 50 55 60  
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe  
 65 70 75 80  
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys  
 85 90 95  
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln  
 100 105 110  
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln  
 115 120 125  
 Ile Pro Val Phe Lys Leu Ser Gly Glu Asn Gly Asp Glu Val Lys Lys  
 130 135 140  
 Glu  
 145

<210> 5713  
 <211> 1996  
 <212> DNA  
 <213> Homo sapiens

<400> 5713  
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 120  
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 180  
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 240  
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 420  
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 480  
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 720  
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 960

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 1080  
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 1860  
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 1996

<210> 5714  
 <211> 408  
 <212> PRT  
 <213> Homo sapiens

<400> 5714  
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 Val Ser Glu Phe Phe Met Asn Ala Lys Lys Asn Lys Pro Glu Trp Arg  
 35 40 45  
 Glu Glu Gln Met Ala Ser Ile Lys Lys Asp Tyr Tyr Lys Ala Leu Glu  
 50 55 60  
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 65 70 75 80  
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180
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 1260  
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 1320  
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 1458

&lt;210&gt; 5716

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5716

Leu Gln Glu Glu Val Arg Val Lys Ile Lys Asp Leu Asn Glu His Ile  
 1 5 10 15  
 Val Cys Cys Leu Cys Ala Gly Tyr Phe Val Asp Ala Thr Thr Ile Thr

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<210> 5717
<211> 1419
<212> DNA
<213> Homo sapiens
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4882

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 1419

&lt;210&gt; 5718

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5718

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			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
			35				40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
			50			55					60				
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70				75						80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
				85				90						95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105				110			
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
			115				120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
			130			135				140					
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150				155						160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
				165				170						175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180				185					190			
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
			195				200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
			210			215					220				
Asn	Ala	Tyr	Val												

225

&lt;210&gt; 5719

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5719

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180  
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1380

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 2267

&lt;210&gt; 5720

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5720

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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40					45			
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50					55					60				
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70					75				80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
				85					90					95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
		100						105					110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
		115					120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130	135	140
Phe His Tyr Ala Val	Asp Asn Leu Gly Ala	Asp Ala Ile Ala Thr Gly
145	150	155
His Tyr Ala Arg Thr	Ser Leu Glu Asp Glu Glu Val	Phe Glu Gln Lys
165	170	175
His Val Lys Lys Pro	Glu Gly Leu Phe Arg Asn Arg	Phe Glu Val Arg
180	185	190
Asn Ala Val Lys Leu	Leu Gln Ala Ala Asp Ser Phe	Lys Asp Gln Thr
195	200	205
Phe Phe Leu Ser Gln	Val Ser Gln Asp Ala Leu Arg	Arg Thr Ile Phe
210	215	220
Pro Leu Gly Gly Leu	Thr Lys Glu Phe Val Lys Lys	Ile Ala Ala Glu
225	230	235
Asn Arg Leu His His	Val Leu Gln Lys Lys Glu Ser	Met Gly Met Cys
245	250	255
Phe Ile Gly Lys Arg	Asn Phe Glu His Phe Leu Leu	Gln Tyr Leu Gln
260	265	270
Pro Arg Pro Gly His	Phe Ile Ser Ile Glu Asp Asn	Lys Val Leu Gly
275	280	285
Thr His Lys Gly Trp	Phe Leu Tyr Thr Leu Gly Gln	Arg Ala Asn Ile
290	295	300
Gly Gly Leu Arg Glu	Pro Trp Tyr Val Val Glu Lys	Asp Ser Val Lys
305	310	315
Gly Asp Val Phe Val	Ala Pro Arg Thr Asp His Pro	Ala Leu Tyr Arg
325	330	335
Asp Leu Leu Arg Thr	Ser Arg Val His Trp Ile Ala	Glu Glu Pro Pro
340	345	350
Ala Ala Leu Val Arg	Asp Lys Met Met Glu Cys His	Phe Arg Phe Arg
355	360	365
His Gln Met Ala Leu	Val Pro Cys Val Leu Thr Leu	Asn Gln Asp Gly
370	375	380
Thr Val Trp Val Thr	Ala Val Gln Ala Val Arg Ala	Leu Ala Thr Gly
385	390	395
Gln Phe Ala Val Phe	Tyr Lys Gly Asp Glu Cys Leu	Gly Ser Gly Lys
405	410	415
Ile Leu Arg Leu Gly	Pro Ser Ala Tyr Thr Leu Gln	Lys Gly Gln Arg
420	425	430
Arg Ala Gly Met Ala	Thr Glu Ser Pro Ser Asp Ser	Pro Glu Asp Gly
435	440	445
Pro Gly Leu Ser Pro	Leu Leu	
450	455	

&lt;210&gt; 5721

&lt;211&gt; 400

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5721

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 300  
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 400

<210> 5722  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

<400> 5722  
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 20 25 30  
 Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu  
 35 40 45  
 Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr  
 50 55 60  
 Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro  
 65 70 75 80

<210> 5723  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

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 360  
 ctctctctgc acgcgt  
 376

<210> 5724  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 5724  
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20	25	30	
Met Gly Val Pro	Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His		
35	40	45	
Ala Gly Leu Ser	Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys		
50	55	60	
Ser Gly Cys Leu	Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro		
65	70	75	80
Gln His Ala Pro	Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val		
85	90	95	
Leu His Ile Pro	Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro		
100	105	110	
Val Leu His Met	Pro Cys Pro Ala Leu Leu Leu His Ala		
115	120	125	

&lt;210&gt; 5725

&lt;211&gt; 1160

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5725

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960

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<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

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			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
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Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
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Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
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Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105					110		
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
		115					120					125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
	130					135					140				
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
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Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
			165						170					175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
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Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
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Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
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Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Leu	Leu	Gln	Gly	
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Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
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Asp

<210> 5727

<211> 1237

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5727

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&lt;210&gt; 5728

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5728

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			20					25					30		
Lys	Tyr	Arg	Asp	Ile	Asp	Glu	Asp	Glu	Ile	Leu	Arg	Thr	Leu	Ser	Pro
		35					40					45			
Glu	Glu	Leu	Glu	Gln	Leu	Asp	Cys	Glu	Leu	Gln	Glu	Met	Asp	Pro	Glu
		50				55					60				
Asn	Met	Leu	Leu	Pro	Ala	Gly	Leu	Arg	Gln	Arg	Asp	Gln	Thr	Lys	Lys
65					70					75					80
Ser	Pro	Thr	Gly	Pro	Leu	Asp	Arg	Glu	Ala	Leu	Leu	Gln	Tyr	Leu	Glu
			85					90						95	
Gln	Gln	Ala	Leu	Glu	Val	Lys	Glu	Arg	Asp	Asp	Leu	Val	Pro	Phe	Thr
		100						105					110		
Gly	Glu	Lys	Lys	Gly	Lys	Pro	Tyr	Ile	Gln	Pro	Lys	Arg	Glu	Ile	Pro
		115					120					125			
Ala	Glu	Glu	Gln	Ile	Thr	Leu	Glu	Pro	Glu	Leu	Glu	Glu	Ala	Leu	Ala
	130					135					140				
His	Ala	Thr	Asp	Ala	Glu	Met	Cys	Asp	Ile	Ala	Ala	Ile	Leu	Asp	Met
145					150					155					160
Tyr	Thr	Leu	Met	Ser	Asn	Lys	Gln	Tyr	Tyr	Asp	Ala	Leu	Cys	Ser	Gly
			165					170						175	
Glu	Ile	Cys	Asn	Thr	Glu	Gly	Ile	Ser	Ser	Val	Val	Gln	Pro	Asp	Lys
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Tyr	Lys	Pro	Val	Pro	Asp	Glu	Pro	Pro	Asn	Pro	Thr	Asn	Ile	Glu	Glu
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225					230					235					240
Glu	Ala	Met	Lys	Ala	Asn	Thr	Tyr	Val	Arg	Ser	Phe	Ser	Leu	Val	Ala
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Thr	Arg	Ser	Gly	Asp	Pro	Ile	Ala	Asn	Ala	Val	Ala	Asp	Met	Leu	Arg
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		275					280					285			
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Leu	Thr	Glu	Leu	Arg	Val	Asp	Asn	Gln	Arg	Gln	Trp	Pro	Gly	Asp	Ala
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Val	Glu	Met	Glu	Met	Ala	Thr	Val	Leu	Glu	Gln	Cys	Pro	Ser	Ile	Val
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Arg	Phe	Gly	Tyr	His	Phe	Thr	Gln	Gln	Gly	Pro	Arg	Ala	Arg	Ala	Ala
		340						345					350		
Gln	Ala	Met	Thr	Arg	Asn	Asn	Glu	Leu	Arg	Arg	Gln	Gln	Lys	Lys	Arg
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&lt;210&gt; 5729

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5729

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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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			20					25					30		
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

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<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
		35					40						45		
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50					55					60				
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70					75					80
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
			85						90					95	
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
		100						105					110		
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
	115						120					125			
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
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Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165						170					175	
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Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 <211> 82  
 <212> PRT  
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 Leu Cys Leu Leu Phe Ala Lys Leu Val Ser Tyr Thr Phe Leu Phe Trp  
 35 40 45  
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<210> 5735  
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<400> 5735

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2880  
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3120  
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3180  
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3240



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 3960  
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 4020  
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 4241

&lt;210&gt; 5736

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5736

Met	Pro	Gly	Pro	Thr	Gln	Thr	Leu	Ser	Pro	Asn	Gly	Glu	Asn	Asn	Asn
1			5					10					15		
Asp	Ile	Ile	Gln	Asp	Asn	Asn	Gly	Thr	Ile	Ile	Pro	Phe	Arg	Lys	His
		20					25					30			
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
	35					40					45				
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
	50				55					60					
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65				70					75					80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
			85					90					95		
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

	100		105		110	
Glu Tyr Ile	His Asn Phe Lys	Leu Leu Gln Ala Ser	Phe Lys Arg Met			
	115		120		125	
Asn Val Asp	Lys Val Ile Pro	Val Glu Lys Leu Val	Lys Gly Arg Phe			
	130		135		140	
Gln Asp Asn	Leu Asp Phe Ile	Gln Trp Phe Lys	Lys Phe Tyr Asp Ala			
	145		150		155	
Asn Tyr Asp	Gly Lys Glu Tyr	Asp Pro Val Glu	Ala Arg Gln Gly Gln			
	165		170		175	
Asp Ala Ile	Pro Pro Pro Asp	Pro Gly Glu Gln	Ile Phe Asn Leu Pro			
	180		185		190	
Lys Lys Ser	His His Ala Asn	Ser Pro Thr Ala	Gly Ala Ala Lys Ser			
	195		200		205	
Ser Pro Ala	Ala Lys Pro Gly	Ser Thr Pro Ser	Arg Pro Ser Ser Ala			
	210		215		220	
Lys Arg Ala	Ser Ser Ser Gly	Ser Ala Ser Lys	Ser Asp Lys Asp Leu			
	225		230		235	
Glu Thr Gln	Val Ile Gln Leu	Asn Glu Gln Val	His Ser Leu Lys Leu			
	245		250		255	
Ala Leu Glu	Gly Val Glu Lys	Glu Arg Asp Phe	Tyr Phe Gly Lys Leu			
	260		265		270	
Arg Glu Ile	Glu Leu Leu Cys	Gln Glu His Gly	Gln Glu Asn Asp Asp			
	275		280		285	
Leu Val Gln	Arg Leu Met Asp	Ile Leu Tyr Ala	Ser Glu Glu His Glu			
	290		295		300	
Gly His Thr	Glu Glu Pro Glu	Ala Glu Glu Gln	Ala His Glu Gln Gln			
	305		310		315	
Pro Pro Gln	Gln Glu Tyr				320	
	325					

&lt;210&gt; 5737

&lt;211&gt; 340

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5737

```

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120
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240
aagatgttgc agtgccatcc tcacctggtg gcttgaaatc ggccaagggtg ggagcattta
300
caccgcagaa atgacaccgc acgccagcgc cccgcggccg
340

```

&lt;210&gt; 5738

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5738

Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu  
 1 5 10 15  
 Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu  
 20 25 30  
 Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu  
 35 40 45  
 Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val  
 50 55 60  
 Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His  
 65 70 75 80  
 Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln  
 85 90 95  
 Gly Gly Xaa

&lt;210&gt; 5739

&lt;211&gt; 780

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5739

actttcataa ttgtaacatt gaaatcttta atctggaata tgtactggca taaagagtga  
 60  
 ggcacataca tggcctttact attttccaga gggccaactg cttttactga ataatccatt  
 120  
 ttactcggtta attggaaaca cctctagcct gtactaaatt tccatattta tttggcccgt  
 180  
 ttcaaagtcc tctattctct gctcatctgt ccacatctaa gtgctttaac tattgtggct  
 240  
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 300  
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 360  
 aaataaaaatc tctgggtatt tccaagggaa gtgaaggact gacaccatga ttagaaagca  
 420  
 gagccagcac catggcccgt ccctgagcat gtccagcaaa ccctgccagg ctctgcagct  
 480  
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 540  
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 600  
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 660  
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 720  
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 780

&lt;210&gt; 5740

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5740

```

Met Ile Arg Lys Gln Ser Gln His His Gly Pro Ser Leu Ser Met Ser
 1           5           10           15
Ser Lys Pro Cys Gln Ala Leu Gln Leu Leu Ser Thr Leu Pro Ser Gly
          20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
          35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
          50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
          85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
          100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
          115          120

```

&lt;210&gt; 5741

&lt;211&gt; 2444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5741

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120
gagtatgagg cggctgcagc acgcacgag gctatggacc ctgccactgt cgagcagcag
180
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240
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300
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420
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900

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1020  
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1080  
cgggcaactt ccccccctgt gtccctctac cctgcttttg agtgccgggc cctcattcag  
1140  
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1200  
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1260  
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2444

&lt;210&gt; 5742

<211> 427  
 <212> PRT  
 <213> Homo sapiens

<400> 5742

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 20          25          30
Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala Arg
 35          40          45
Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
 50          55          60
Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
 65          70          75          80
Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
 85          90          95
Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
100          105          110
Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
115          120          125
Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
130          135          140
Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
145          150          155          160
Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
165          170          175
Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
180          185          190
Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
195          200          205
Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
210          215          220
Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
225          230          235          240
Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
245          250          255
Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
260          265          270
Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
275          280          285
Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp
290          295          300
Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
305          310          315          320
Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
325          330          335
Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
340          345          350
Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
355          360          365
Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
370          375          380
Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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<210> 5743
<211> 550
<212> DNA
<213> Homo sapiens
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<210> 5744
<211> 95
<212> PRT
<213> Homo sapiens
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<210> 5745  
<211> 849

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5745

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cgataaaaaa caccagggca cggacactcc aggggaaatg cttattgagt aaagtatccg
120
aggaagtgat gcagggcagg taaacagctg gtgctcagca gcgagaggac gcgtcactct
180
gccgttctgc aggggtgacgc cctccccgta cctcgctgag agccacctgc agacacagca
240
ggccacagca gaatgcacag gtcactgttg taggggaaca aatcgtaatg cccagagaaa
300
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360
gcccttcccg tgattgatct gagagcttca cagccggcgg cactgggacc catttccaga
420
aacactggaa caccaggtct ctcagatgcc cgcgggaggg gcccaggga ggcctttctc
480
agcatcagct tttgggtgac aaaccccata cagcaaaact gtacaaatac acacaacgga
540
ccccagctg acagtgagac caggacccta ggaaggtcag gtggtggtga agtcatcccc
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780
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840
gtcccatgg
849

```

&lt;210&gt; 5746

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5746

```

Met Thr Ser Pro Pro Asp Leu Pro Arg Val Leu Val Ser Leu Ser
1      5      10      15
Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe
20      25      30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
35      40      45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
50      55      60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
65      70      75      80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
85      90      95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

```



			100					105					110		
Leu	Cys	Ile	Leu	Leu	Trp	Pro	Ala	Val	Ser	Ala	Gly	Gly	Ser	Gln	Arg
		115					120					125			
Gly	Thr	Gly	Arg	Ala	Ser	Pro	Cys	Arg	Thr	Ala	Glu				
	130					135					140				

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<210> 5747
<211> 1999
<212> DNA
<213> Homo sapiens
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<400> 5747					
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120					
actcggggcg	ccggggaccc	ggccccgtac	ctcagccccg	gctggggcag	cgcgagcgag
180					
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240					
gacctggagc	aggagtggaa	gcccccgat	gaggagtga	tcaagaaact	ggtggatcag
300					
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360					
aggaggaaca	agctgggata	tgtgagcgtt	aagctactca	catccttcaa	aaaggtgaaa
420					
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480					
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540					
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900					
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1020					
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1080					
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1140					
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1200					
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1260					

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&lt;210&gt; 5748

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5748

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5750

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&lt;210&gt; 5754

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5754

Asp Ser Leu Glu Ser Asn Ile Ser Asp Gln Asp Ser Asp Ser Asn Met

1	5	10	15
Asp Leu Met	Pro Gly Ile Leu Lys	Gln Pro Ser Leu Thr	Leu Glu Leu
	20	25	30
Phe Pro Asn His Thr Asp Asn Leu Asn Ser Ser	Gln Arg Leu Ser Pro		
	35	40	45
Ser Ser Arg Met Arg Lys Leu Pro Gln Gly Arg	Pro Val Pro Pro Leu		
	50	55	60
Gly Pro Glu Thr Arg Val Ser Val Val Trp Val Glu Arg Tyr Asp Asp			
65	70	75	80
Ile Glu Asn Phe Pro Leu Ser Glu Leu Met Thr Glu Ile Ser Thr Gly			
	85	90	95
Val Glu Thr Thr Ala Asn Ser Ser Thr Ser Leu Arg Ser Thr Thr Leu			
	100	105	110
Glu Lys Glu Val Pro Val Ile Phe Ile His Pro Leu Asn Thr Gly Leu			
	115	120	125
Phe Arg Ile Lys Ile Gln Gly Ala Thr Gly Lys Phe Asn Met Val Ile			
	130	135	140
Pro Leu Val Asp Gly Met Ile Val Ser Arg Arg Ala Leu Gly Phe Leu			
145	150	155	160
Val Arg Gln Thr Val Ile Asn Ile Cys Arg Arg Lys Arg Leu Glu Ser			
	165	170	175
Asp Ser Tyr Ser Pro Pro His Val Arg Arg Lys Gln Lys Ile Thr Asp			
	180	185	190
Ile Val Asn Lys Tyr Arg Asn Lys Gln Leu Glu Pro Glu Phe Tyr Thr			
	195	200	205
Ser Leu Phe Gln Glu Val Gly Leu Lys Asn Cys Ser Ser			
	210	215	220

&lt;210&gt; 5755

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5755

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&lt;210&gt; 5756

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5756

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			20					25					30		
Ala	Ala	Leu	Leu	Ala	Gln	Asp	Tyr	Cys	Asp	Ala	Ile	Asp	Leu	Asn	Leu
		35					40					45			
Gly	Cys	Pro	Gln	Met	Ile	Ala	Lys	Arg	Gly	His	Tyr	Gly	Ala	Phe	Leu
	50					55					60				
Gln	Asp	Glu	Trp	Asp	Leu	Leu	Gln	Arg	Met	Ile	Leu	Leu	Ala	His	Glu
65					70					75					80
Lys	Leu	Ser	Val	Pro	Val	Thr	Cys	Lys	Ile	Arg	Val	Phe	Pro	Glu	Ile
				85					90					95	
Asp	Lys	Thr	Val	Arg	Tyr	Ala	Gln	Met	Leu	Glu	Lys	Ala	Gly	Cys	Gln
			100					105					110		
Leu	Leu	Thr	Val	His	Gly	Arg	Thr	Lys	Glu	Gln	Lys	Gly	Pro	Leu	Ser

115	120	125
Gly Ala Ala Ser Trp Glu His Ile Lys Ala Val Arg Lys Ala Val Ala		
130	135	140
Ile Pro Val Phe Ala Asn Gly Asn Ile Gln Cys Leu Gln Asp Val Glu		
145	150	155
Arg Cys Leu Arg Asp Thr Gly Val Gln Gly Val Met Ser Ala Glu Gly		
165	170	175
Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp		
180	185	190
Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro		
195	200	205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu		
210	215	220
Gln Val His Gln Glu Leu Arg Glu Glu Leu Ala Lys Val Lys Thr Leu		
225	230	235
Glu Gly Ile Ala Ala Val Ser Gln Glu Leu Lys Leu Arg Cys Gln Glu		
245	250	255
Glu Ile Ser Arg Gln Glu Gly Ala Lys Pro Thr Gly Asp Leu Pro Phe		
260	265	270
His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser		
275	280	285
Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu		
290	295	300
Gly Gly Thr Glu Val Leu Ser Lys Asn Lys Gln Lys Lys Gln Leu Arg		
305	310	315
Asn Pro His Lys Thr Phe Asp Pro Ser Leu Lys Pro Lys Tyr Ala Lys		
325	330	335
Cys Asp Gln Cys Gly Asn Pro Lys Gly Asn Arg Cys Val Phe Ser Leu		
340	345	350
Cys Arg Gly Cys Cys Lys Lys Arg Ala Ser Lys Glu Thr Ala Asp Cys		
355	360	365
Pro Gly His Gly Leu Leu Phe Lys Thr Lys Leu Glu Lys Ser Leu Ala		
370	375	380
Trp Lys Glu Ala Gln Pro Glu Leu Gln Glu Pro Gln Pro Ala Ala Pro		
385	390	395
Gly Thr Pro Gly Gly Phe Ser Glu Val Met Gly Ser Ala Leu Ala		
405	410	415

&lt;210&gt; 5757

&lt;211&gt; 2362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5757

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240  
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 2280  
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 2362

&lt;210&gt; 5758

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5758

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		20						25					30		
Asp	Gly	Ala	Leu	Glu	Asn	Ala	Gln	Asn	Leu	Gly	Tyr	Gln	Gly	Ala	Lys
	35						40					45			
Phe	Ala	Trp	Glu	Ser	Ala	Asp	Ser	Gly	Leu	Glu	Val	Cys	Pro	Glu	Asp
	50					55					60				
Ile	Tyr	Gly	Val	Gln	Glu	Val	His	Val	Asn	Gly	Ala	Val	Val	Leu	Ala
65				70					75					80	
Phe	Glu	Leu	Tyr	Tyr	His	Thr	Thr	Gln	Asp	Leu	Gln	Leu	Phe	Arg	Glu
			85					90						95	
Gly	Gly	Gly	Trp	Glu	Val	Val	Arg	Ala	Val	Ala	Lys	Phe	Trp	Cys	Ser
			100					105					110		
Arg	Val	Glu	Trp	Ser	Pro	Arg	Glu	Glu	Lys	Tyr	His	Leu	Arg	Gly	Val
		115					120					125			
Met	Ser	Pro	Asp	Glu	Tyr	His	Ser	Gly	Val	Asn	Asn	Ser	Val	Tyr	Thr
	130					135					140				
Asn	Val	Leu	Val	Gln	Asn	Ser	Leu	Arg	Phe	Ala	Ala	Ala	Leu	Ala	Gln
145				150					155					160	
Asp	Leu	Gly	Leu	Pro	Ile	Pro	Ser	Gln	Trp	Leu	Ala	Val	Ala	Asp	Lys
			165					170						175	
Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
			180					185					190		
Gly	Tyr	Glu	Pro	Gly	Glu	Val	Val	Lys	Gln	Ala	Asp	Val	Val	Leu	Leu
	195					200						205			
Gly	Tyr	Pro	Val	Pro	Phe	Ser	Leu	Ser	Pro	Asp	Val	Arg	Arg	Lys	Asn
	210					215					220				
Leu	Glu	Ile	Tyr	Glu	Ala	Val	Thr	Ser	Pro	Gln	Gly	Pro	Ala	Met	Thr
225				230						235				240	
Trp	Ser	Met	Phe	Ala	Val	Gly	Trp	Met	Glu	Leu	Lys	Asp	Ala	Val	Arg



				245				250					255		
Ala	Arg	Gly	Leu	Leu	Asp	Arg	Ser	Phe	Ala	Asn	Met	Ala	Glu	Pro	Phe
			260					265					270		
Lys	Val	Trp	Thr	Glu	Asn	Ala	Asp	Gly	Ser	Gly	Ala	Val	Asn	Phe	Leu
		275					280					285			
Thr	Gly	Met	Gly	Gly	Phe	Leu	Gln	Ala	Val	Val	Phe	Gly	Cys	Thr	Gly
	290					295					300				
Phe	Arg	Val	Thr	Arg	Ala	Gly	Val	Thr	Phe	Asp	Pro	Val	Cys	Leu	Ser
305					310					315					320
Gly	Ile	Ser	Arg	Val	Ser	Val	Ser	Gly	Ile	Phe	Tyr	Gln	Gly	Asn	Lys
			325						330					335	
Leu	Asn	Phe	Ser	Phe	Ser	Glu	Asp	Ser	Val	Thr	Val	Glu	Val	Thr	Ala
			340					345					350		
Arg	Ala	Gly	Pro	Trp	Ala	Pro	His	Leu	Glu	Ala	Glu	Leu	Trp	Pro	Ser
		355					360					365			
Gln	Ser	Arg	Leu	Ser	Leu	Leu	Pro	Gly	His	Lys	Val	Ser	Phe	Pro	Arg
	370					375					380				
Ser	Ala	Gly	Arg	Ile	Gln	Met	Ser	Pro	Pro	Lys	Leu	Pro	Gly	Ser	Ser
385					390					395					400
Ser	Ser	Glu	Phe	Pro	Gly	Arg	Thr	Phe	Ser	Asp	Val	Arg	Asp	Pro	Leu
			405						410					415	
Gln	Ser	Pro	Leu	Trp	Val	Thr	Leu	Gly	Ser	Ser	Ser	Pro	Thr	Glu	Ser
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Leu	Thr	Val	Asp	Pro	Ala	Ser	Glu								
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<210> 5759
<211> 1333
<212> DNA
<213> Homo sapiens
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120
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180
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660
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 780  
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 1320  
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 1333

&lt;210&gt; 5760

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5760

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			20				25						30		
Asp	Ser	Val	Glu	Ser	Ala	Val	Asn	Ala	Glu	Arg	Gly	Gly	Ala	Asp	Arg
		35					40					45			
Ile	Glu	Leu	Cys	Ser	Gly	Leu	Ser	Glu	Gly	Gly	Thr	Thr	Pro	Ser	Met
		50				55					60				
Gly	Val	Leu	Gln	Val	Val	Lys	Gln	Ser	Val	Gln	Ile	Pro	Val	Phe	Val
65					70					75					80
Met	Ile	Arg	Pro	Arg	Gly	Gly	Asp	Phe	Leu	Tyr	Ser	Asp	Arg	Glu	Ile
			85					90						95	
Glu	Val	Met	Lys	Ala	Asp	Ile	Arg	Leu	Ala	Lys	Leu	Tyr	Gly	Ala	Asp
			100					105					110		
Gly	Leu	Val	Phe	Gly	Ala	Leu	Thr	Glu	Asp	Gly	His	Ile	Asp	Lys	Glu
		115					120					125			
Leu	Cys	Met	Ser	Leu	Met	Ala	Ile	Cys	Arg	Pro	Leu	Pro	Val	Thr	Phe
		130				135					140				
His	Arg	Ala	Phe	Asp	Met	Val	His	Asp	Pro	Met	Ala	Ala	Leu	Glu	Thr
145					150					155					160
Leu	Leu	Thr	Leu	Gly	Phe	Glu	Arg	Val	Leu	Thr	Ser	Gly	Cys	Asp	Ser
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[illegible]

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<210> 5761
<211> 1452
<212> DNA
<213> Homo sapiens
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120
tgaaactgaa tcacaggaga tatttccagg tttgctggga tgggaaacct gctcaaagtc
180
cttaccaggg aaattgaaaa ctatccacac tttttcctgg attttgaaaa tgctcagcct
240
acagaaggag agagagaaat ctggaaccag atcagcgccg tccttcagga ttctgagagc
300
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360
aatcccaatg acattcagct tcaagaaaaa gcttggaatg cgggtgtgcc tcttgttgtg
420
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480
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&lt;210&gt; 5762

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5762

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&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5764

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&lt;211&gt; 3220



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5765

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 210 215 220  
 Asn Ile Val Val Ala Thr Ala Asp Gly Ser Ser Ala Ser Pro Val Gln  
 225 230 235 240  
 Phe Tyr Lys Val Cys Val Ser Val Val Ser Glu Lys Cys Arg Ile Asp  
 245 250 255  
 Thr Glu Ile Leu Pro Ser Leu Phe Met Arg Cys Thr Thr Asp Leu Asn  
 260 265 270  
 Arg Lys Asp Lys Phe Pro Ala Ile Thr His Leu Lys Phe Leu Ala Arg  
 275 280 285  
 Asp Met Ser Glu Gln Val Leu Leu Cys Ala Ser Ser Gln Thr Ser Ser  
 290 295 300  
 Ile Val Glu Cys Trp Ser Leu Arg Lys Glu Gly Leu Pro Val Asn Asn  
 305 310 315 320  
 Ile Phe Gln Gln Ile Ser Pro Val Val Gly Asp Lys Gln Pro Thr Ile  
 325 330 335  
 Leu Lys Trp Arg Ile Leu Ser Ala Thr Asn Asp Leu Asp Arg Val Ser

4932

770		775		780	
Gly Arg Ala Pro Thr	Leu Pro Gly Ser Ala	Ala Thr Leu Gln Leu Asp			
785	790	795	800		
Gly Leu Ala Arg Ala	Pro Gly Gln Pro Lys Ile Asp His Leu Arg Arg				
	805	810	815		
Leu His Leu Gly Ala Cys	Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg				
	820	825	830		
Cys Gly Cys Val Thr Met	Leu Lys Ser Pro Asn Arg Thr Thr Ala Val				
	835	840	845		
Lys Gln Trp Glu Gln Arg	Trp Ile Lys Asn Cys Leu Cys Gly Gly Leu				
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Trp Trp Arg Val Pro	Leu Ser Tyr Pro				
865	870				

<210> 5767  
 <211> 1910  
 <212> DNA  
 <213> Homo sapiens

<400> 5767  
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 tcagtatcgt ggggttttgc tctattctga agggatcccc catcacgctg gcagctgtgt  
 180  
 gccaggagag accctgaggg ctgcctcacc acagcaggaa cgcccttctc agtcccagcc  
 240  
 caatcctctc tcacactgcg gtgctctgtc cctatggaaa cagcctctgt atgtgtgtgt  
 300  
 gtgtgtgtgt gtgtgtgtgt gtgtgaataa tatatggaat aaagtttgag attccttgct  
 360  
 ttttcatggt accttagcct caatttttaa cttacattgt ttgttaaaat tatcaaattg  
 420  
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 480  
 aaataagtga aaaggcattg agagattgct aagatttggt aagttaaaac aataatatat  
 540  
 ctagaaaaga ctgtgaaaat atatatctca aaagagaaca aggcatagtc agaagggtca  
 600  
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 660  
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 720  
 aacctaagc ccatgaaaaa gtgctggtat ttttcaggat ctcttcaaga caccttccgt  
 780  
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 840  
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 960  
 agaaactggg gcaagccgct gtcactgtca ctggagctgg ctatactgtt cctcatttcc  
 1020

aacatggaga tctgtgtgca gaggtgagc tgatgttcca gctttttggc tttcttatca  
 1080  
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 1260  
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 1320  
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 1380  
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 1680  
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 1800  
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 1860  
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 1910

&lt;210&gt; 5768

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5768

Met	Asn	Tyr	Thr	Glu	Ser	Ser	Pro	Leu	Arg	Glu	Ser	Thr	Ala	Ile	Gly
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Phe	Thr	Pro	Glu	Leu	Glu	Ser	Ile	Ile	Pro	Val	Pro	Ser	Asn	Lys	Thr
		20						25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
		35					40					45			
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
	50					55				60					
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65				70					75					80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
		85						90						95	
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
		100						105					110		
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
	115					120						125			
Arg	Arg	Leu	Phe	Glu	Pro	Leu	Arg	Val	Pro	Pro	Asp	Leu	Phe	Arg	Arg

130		135		140
Leu Thr Gly Gln Phe Cys Met Ile Gln Thr Leu Lys Lys Gly Gln Thr				
145		150		155
Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu				160
	165		170	175
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn				
	180		185	190
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln				
	195		200	205
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn				
	210		215	220
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu				240
225		230		235
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp				
	245		250	255
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys				
	260		265	270
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser				
	275		280	285
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp				
	290		295	300
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His				320
305		310		315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu				
	325		330	335
Glu Gly Ala Glu Asp Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn				
	340		345	350
Thr Leu Lys Val His Gln Leu Pro				
	355		360	

&lt;210&gt; 5769

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5769

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120

ctgcagacac agctgaagga agtattaaga gaaaatgatc tcttgcgga ggatgtggaa  
180

gtaaaggaga gcaaattgag ttcttcaatg aatagcatca agatcttctg gggcccagag  
240

ctgaagaagg aacgagccct gagaaaggat gaagcttcca aaatcccat ttggaaggaa  
300

cagtacagag ttgtacaaga ggaaaaccag gtaagttcta cgtgtgttta cctttattgg  
360

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420

cacgcgt

427

&lt;210&gt; 5770

<211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 5770  
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 Lys Asp Val Glu Val Lys Glu Ser Lys Leu Ser Ser Ser Met Asn Ser  
           20                  25                  30  
 Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg  
           35                  40                  45  
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val  
   50                  55                  60  
 Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp  
 65                  70                  75                  80  
 Leu Asn Ser Cys Ile  
                   85

<210> 5771  
 <211> 2539  
 <212> DNA  
 <213> Homo sapiens

<400> 5771  
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 120  
 gtcagatgtg ccaccccgcc acaactggcc aatgggggtga cggaaggcct ggactatggc  
 180  
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 240  
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 300  
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 360  
 catatacagt atcagtgctt tcctggttat aagctccatg gaaattcatc aagaaggtgc  
 420  
 ctctccaatg gctcctggag tggcagctca cttccttgcc tgccttgag atgttccaca  
 480  
 ccagtaattg aatatggaac tgtcaatggg acagattttg actgtggaaa ggcagcccgg  
 540  
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 600  
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 660  
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 720  
 tgcaggtctg gatatgtcat acaaggcagt tcagatctga tttgtacaga gaaaggggta  
 780  
 tggaaccagc cttatccagt ctgtgagccc ttgtcctgtg ggtccccacc gtctgtcgcc  
 840  
 aatgcagtgg caactggaga ggcacacacc tatgaaagtg aagtgaaact cagatgtctg  
 900



gaaggttata cgatggatac agatacagat acaatcacct gtcagaaaga tggtcgctgg  
960  
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1020  
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1080  
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1140  
ccattctccg atgaatcttg cagtccagtt tcttgtggga aacctgaaag tccagaacat  
1200  
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1320  
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1740  
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2280  
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2340  
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2520

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2539

&lt;210&gt; 5772

&lt;211&gt; 642

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5772

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Tyr Thr Cys Asn Glu Gly Phe Leu Leu Glu Gly Ala Arg Ser Arg Val
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Cys Leu Ala Asn Gly Ser Trp Ser Gly Ala Thr Pro Asp Cys Val Pro
          20          25          30
Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly
          35          40          45
Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu
          50          55          60
His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp
          65          70          75          80
Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu
          85          90          95
Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly
          100          105          110
His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser
          115          120          125
Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser
          130          135          140
Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val
          145          150          155          160
Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe
          165          170          175
Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp
          180          185          190
Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly
          195          200          205
Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp
          210          215          220
Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln
          225          230          235          240
Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro
          245          250          255
Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala
          260          265          270
Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys
          275          280          285
Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Asp Thr Ile
          290          295          300
Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser
          305          310          315          320
Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His
          325          330          335
Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu
          340          345          350
Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

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          355          360          365
Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys
370          375          380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr
385          390          395          400
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu
          405          410          415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly
          420          425          430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe
          435          440          445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val
          450          455          460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala
465          470          475          480
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys
          485          490          495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu
          500          505          510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg
          515          520          525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp
          530          535          540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly
545          550          555          560
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln
          565          570          575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu
          580          585          590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro
          595          600          605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His
610          615          620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala
625          630          635          640
Pro Leu

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&lt;210&gt; 5773

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5773

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120
agccgggtccc ggtcgcgatc ccgggacaag gacgcggtgc ggaagcgttc caaatctcgg
180
gaaagtaaac ggaaccggcg gcgggagtcg cggtcccgtt cgcgctccac caacacggcc
240
gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
300

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tcgggcgac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gaggaggagg  
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 420  
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 480  
 gaactggaga aaaggaagga tgaaattgaa cgagaagtcc tccgaagggt ggaggaagcc  
 540  
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 579

<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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Met	Gly	Arg	Ser	Arg	Ser	Arg	Ser	Ser	Ser	Arg	Ser	Lys	His	Thr	Lys
			20					25					30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40					45			
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55					60				
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65					70					75					80
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
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Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
			100												

<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 1441

&lt;210&gt; 5776

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5776

Met	Gly	Ile	Asn	Met	Pro	Lys	Val	Leu	Ser	Gln	Pro	Ser	Asp	Leu	Asp
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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
		20					25						30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35				40					45				
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
	50				55				60						
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65			70						75					80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85					90					95		
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

Pro	Glu	Gly	Ala	Pro	Glu	Arg	Ala	Ala	Glu	Leu	Gly	Val	Asn	Phe	Gly
		115					120					125			
Arg	Ser	Arg	Gln	Gly	Ser	Ala	Arg	Gly	Thr	Lys	Pro	His	Arg	Cys	Glu
	130					135					140				
Ala	Cys	Gly	Lys	Ser	Phe	Lys	Tyr	Asn	Ser	Leu	Leu	Lys	His	Gln	
145					150					155				160	
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ala	Cys	His	Glu	Cys	Gly	Lys
			165						170					175	
Cys	Phe	Ala	Ala	Ala	Ser	Arg	Phe	Ile	Gln	His	Gln	Arg	Ile	His	Ser
		180					185					190			
Gly	Glu	Lys	Pro	Tyr	Ala	Cys	Pro	Glu	Cys	Ser	Lys	Thr	Phe	Thr	Arg
	195					200					205				
Ser	Ser	Asn	Leu	Ile	Lys	His	Gln	Val	Ile	His	Ser	Gly	Glu	Arg	Pro
	210				215						220				
Phe	Ala	Cys	Gly	Asp	Cys	Gly	Lys	Leu	Phe	Arg	Arg	Ser	Phe	Ala	Leu
225				230					235					240	
Leu	Glu	His	Ala	Arg	Val	His	Ser	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Ser
			245					250						255	
Asp	Cys	Gly	Lys	Cys	Phe	Arg	Gly	Arg	Ser	His	Phe	Phe	Arg	His	Asn
	260					265						270			
Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	His	Cys	Leu	Asp	Cys	Gly	Lys
	275					280					285				
Ser	Phe	Ser	His	Ser	Ser	His	Leu	Ile	Lys	His	Gln	Arg	Thr	His	Arg
	290				295						300				
Gly	Val	Arg	Pro	Tyr	Ala	Cys	Pro	Leu	Cys	Gly	Lys	Ser	Phe	Ser	Arg
305				310					315					320	
Arg	Ser	Asn	Leu	His	Arg	His	Glu	Lys	Ile	His	Thr	Thr	Gly	Pro	Lys
			325					330					335		
Ala	Leu	Ala	Met	Leu	Met	Leu	Gly	Ala	Ala	Ala	Ala	Gly	Ala	Leu	Ala
		340				345					350				
Thr	Pro	Pro	Pro	Ala	Pro	Thr									
		355													

&lt;210&gt; 5777

&lt;211&gt; 1431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5777

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gggagcgctt tctcccgga accgcggctg tgacccaagt ggcccggacc agtttggggc  
120

tgcgtgcggc ctgcctcaag caaccaggta cgtaggctcg cgcccagct cggcgctgcg  
180

gtgggagccg gagggcgaca gtcagagccg gggtgccagc gggacgcgac cgccagatcc  
240

acttaggacc ccgtcggttct gccaagcggc cacgtctgag tcccggggcc tcctcgctgt  
300

gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccgt  
360

gatcaccgac tggcccttgt aagcaccttc gcagcaggaa gccagagct gcgcctgccc  
420

tttctgaagg ctgtggaaga ggttgagtg ggcgcattctt agcttgcccc atccccattt  
 480  
 gaggtctgtc ggagctgccc ttcagtgtga gcatccacaa tgggtacccc agcctcggtg  
 540  
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 720  
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 780  
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 840  
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 960  
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 1080  
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 1431

&lt;210&gt; 5778

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5778

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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
		20						25					30		
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
		35				40					45				
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
	50				55						60				
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65				70				75						80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90						95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

100 105 110  
 Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln  
 115 120 125  
 Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala  
 130 135 140  
 Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly  
 145 150 155 160  
 Pro Ser Gln Val

<210> 5779  
 <211> 371  
 <212> DNA  
 <213> Homo sapiens

<400> 5779  
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<210> 5780  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 5780  
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 Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile  
 20 25 30  
 Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys  
 35 40 45  
 Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys  
 50 55 60  
 Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys  
 65 70 75 80  
 Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly  
 85 90 95  
 Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys  
 100 105 110  
 Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser  
 115 120



<210> 5781  
 <211> 845  
 <212> DNA  
 <213> Homo sapiens

<400> 5781  
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 ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt  
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 240  
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 300  
 gcgccaccag caccaggtca ggctggaagc cataggccag gggcagcacc aagcccaaga  
 360  
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 845

<210> 5782  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 5782  
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 Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn  
 20 25 30  
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala  
 35 40 45  
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro  
 50 55 60  
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala  
 65 70 75 80  
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

				85					90					95					
Gly	Gln	Ala	Pro	Ala	Pro	Pro	Ala	Pro	Gly	Gln	Ala	Gly	Ser	His	Arg				
			100					105					110						
Pro	Gly	Ala	Ala	Pro	Ser	Pro	Arg	Cys	Ser	Ser	Gly	Asn	His	Arg	Ser				
		115					120					125							
Ser	Leu	Ala	Val	Ala	Trp	Arg	His	Gly	Thr	Trp	Ile	Gly	Gln	Pro	Pro				
	130					135					140								
Pro	Cys	Pro																	
145																			

&lt;210&gt; 5783

&lt;211&gt; 1839

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5783

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 180  
 tgttgcatgg ccattctcct ttcccaaatt gtgttcattg aagaacaggc ggctggaatt  
 240  
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 300  
 ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt  
 360  
 gagttttaca ggcgtttatc agaggaaatg acacaaagaa gatgggagaa tatgccagtt  
 420  
 tcccatcat tacaacaaa tagaggaccc cagccaggaa gaataagggc ttaggaatt  
 480  
 gtaggtattg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa cttttctgag  
 540  
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 600  
 tcaattgcta ataaaattaa agacaaacaa ggtgacatca cagaagatga gaccatcagg  
 660  
 tttaaactct acttgctgag catgggaata gctaaccag ttaccagaga aacctacggc  
 720  
 tcaggcacac agtaccacat gcagctggcc aaacaactgg ctggaatatt gcaggtgcct  
 780  
 ttagaggaac gagggggaat aatgtcactc acggaggtgt actgcttagt aaaccgagct  
 840  
 cgaggaatgg aattgctctc accagaagat ttagtgaatg cgtgcaagat gctggaagca  
 900  
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 1380  
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 1440  
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 1740  
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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

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Leu	Val	Ile	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys	
			20					25				30			
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35					40					45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
		50				55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65					70					75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
				85					90					95	
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
			100					105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120				125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
		130				135					140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145					150					155					160
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
				165				170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

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<210> 5785
<211> 785
<212> DNA
<213> Homo sapiens
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<400> 5785
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caaatgctgg cacttcaggt gtggccggca ccagccagg cgcagtgggt gggcagggcg
240
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600

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 785

<210> 5786  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 5786  
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 Arg Ser His Ala Ala Ala Gly Glu Gly Pro Ala Pro Gly Ala Pro Glu  
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 Lys Pro Ala Ala Arg Ala Ala Asp Leu Ala Ala Pro Ala Gly Ala Ala  
 35 40 45  
 Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg  
 50 55 60  
 Leu Val Phe Asn Arg Val Asn Arg Arg Arg Asp Pro Ser Lys Ser Pro  
 65 70 75 80  
 Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn  
 85 90 95  
 Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Gln Leu Asp  
 100 105 110  
 Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu  
 115 120 125  
 Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp  
 130 135 140  
 Glu Trp Trp Ala Gln Gln Phe Leu Ala Arg Ile Thr Ser Cys Ser  
 145 150 155

<210> 5787  
 <211> 1683  
 <212> DNA  
 <213> Homo sapiens

<400> 5787  
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 gccctgggg tgagggtgt aagtggcgcg attcgggca gcgccccgat ggaacctct  
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 cagactagga tggctgtatc actaacagca gctgaaactc tggcccttca gggtaacag  
 360

ggacaagaga agatgatgat gatgggacca aaggaagagg aacagtcttg tgagtatgag  
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720  
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780  
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960  
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1140  
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1200  
cattctggag agaaacccta taagtgtagt gactgtggga aaactttcaa acagagctca  
1260  
aacctcggtc agcatcagag aattcatata ggagagaaac cttcgaatg taatgaatgt  
1320  
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1380  
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1440  
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1500  
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1560  
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1620  
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1680  
aaa  
1683

&lt;210&gt; 5788

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5788

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&lt;400&gt; 5790

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&lt;210&gt; 5791

&lt;211&gt; 3285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5791

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 Gly Ala Ser Leu Tyr Val Gly Trp Ala Ala Ser Gly Leu Leu Leu Leu  
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<210> 5795  
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 <212> DNA  
 <213> Homo sapiens

<400> 5795

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&lt;210&gt; 5796

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5796

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Glu	Gly	Arg	Thr	Ser	Ser	Tyr	Gln	Gly	Asn	Gln	Gly	Ser	Leu	Arg	Pro	
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105

&lt;210&gt; 5799

&lt;211&gt; 4261

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5799

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&lt;210&gt; 5800

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5800

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Val	Leu	Glu	Asn	Ala	Gly	Ser	Val	Gly	Leu	Ala	Leu	Ile	Val	Trp	Ile	
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Cys	Ser	Ser	Val	Arg	Trp	Ala	Thr	Arg	Val	Gln	Asp	Ile	Phe	Thr	Ala	
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Gly	Ser	Phe	Ala	Tyr	Gly	Gly	Trp	Asn	Phe	Leu	Asn	Tyr	Val	Thr	Glu	
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Glu	Leu	Val	Asp	Pro	Tyr	Lys	Asn	Leu	Pro	Arg	Ala	Ile	Phe	Ile	Ser	
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Glu Leu Leu Thr Leu Val Ser Gln Lys Met Cys Val Val Val Tyr Pro				
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Glu Val Glu Arg Gly Ser Gly Thr Glu Glu Ala Asn Glu Asp Met Glu				
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 <212> DNA  
 <213> Homo sapiens

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2418

&lt;210&gt; 5802

&lt;211&gt; 350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5802

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Phe	Glu	Lys	Val	Pro	Leu	Phe	Met	Ser	Arg	Ala	Pro	Ser	Glu	Ile	Asp
		35					40					45			
Pro	Arg	Glu	Asn	Pro	Asp	Leu	Ala	Cys	Leu	Gln	Ser	Ile	Ile	Phe	Asp
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Ser	Ala	Leu	Asn	Asp	Val	Thr	Ala	Ala	Arg	Lys	Leu	Lys	Pro	Cys	His
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Leu	Lys	Ala	Ile	Ile	Arg	Gly	Ala	Leu	Cys	His	Leu	Glu	Leu	Lys	His
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Phe	Ala	Glu	Ala	Val	Asn	Trp	Cys	Asp	Glu	Gly	Leu	Gln	Ile	Asp	Ala
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Lys	Glu	Lys	Lys	Leu	Leu	Glu	Met	Arg	Ala	Lys	Ala	Asp	Lys	Leu	Lys
			180					185					190		
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Glu	Arg	Asn	Gln	Asn	Glu	Ala	Leu	Leu	Gln	Ala	Ile	Lys	Ala	Arg	Asn
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Gly	Leu	Gly	Glu	Leu	Phe	Leu	Asp	Gly	Leu	Ser	Thr	Glu	Asn	Pro	His
			245						250					255	
Gly	Ala	Arg	Leu	Ser	Leu	Asp	Gly	Gln	Gly	Arg	Leu	Ser	Trp	Pro	Val
		260						265					270		
Leu	Phe	Leu	Tyr	Pro	Glu	Tyr	Ala	Gln	Ser	Asp	Phe	Ile	Ser	Ala	Phe
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His	Glu	Asp	Ser	Arg	Phe	Ile	Asp	His	Leu	Met	Val	Met	Phe	Gly	Glu
	290					295					300				
Thr	Pro	Ser	Trp	Asp	Leu	Glu	Gln	Lys	Tyr	Cys	Leu	Ile	Ile	Trp	Arg
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Ser	Thr	Leu	Arg	Met	Arg	Thr	Gly	Gln	Asn	Tyr	Thr	Gly	Cys	Leu	Pro
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&lt;210&gt; 5803

&lt;211&gt; 692

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5803

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120



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 <211> 126  
 <212> PRT  
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 Arg Thr Asn Leu Pro Pro Phe Arg Asn Tyr Lys Tyr Asp Ala Leu  
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 Lys Ile Ile His Gln Ala His Lys Ser Lys Thr Asn Glu Leu Val Leu  
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 Ser Leu Glu Asp Asp Glu Arg Leu Leu Leu Lys Glu Asp Ser Thr Leu  
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<210> 5805  
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 <212> DNA  
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720  
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1112

&lt;210&gt; 5806

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5806

Met	Ser	Ile	Tyr	Phe	Pro	Ile	His	Cys	Pro	Asp	Tyr	Leu	Arg	Ser	Ala
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Lys	Met	Thr	Glu	Val	Met	Met	Asn	Thr	Gln	Pro	Met	Glu	Glu	Ile	Gly
			20					25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
		35				40					45				
Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
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Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
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Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
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105

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<212> DNA  
<213> Homo sapiens

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<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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		20						25					30		
Leu	Leu	Gly	Gly	Ile	Pro	Glu	Ser	Gly	Gly	Pro	Asp	Ala	Arg	Gln	Gly
		35					40					45			
Trp	Leu	Ala	Ala	Leu	Gln	Asp	Arg	Ser	Ile	Leu	Ala	Pro	Leu	Ala	Trp
	50					55					60				
Asp	Leu	Gly	Leu	Leu	Leu	Phe	Val	Gly	Gln	His	Ser	Leu	Met	Ala	
65					70				75					80	
Ala	Glu	Arg	Val	Lys	Ala	Trp	Thr	Ser	Arg	Tyr	Phe	Gly	Val	Leu	Gln
				85					90					95	
Arg	Ser	Leu	Tyr	Val	Ala	Cys	Thr	Ala	Leu	Ala	Leu	Gln	Leu	Val	Met
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Arg	Tyr	Trp	Glu	Pro	Ile	Pro	Lys	Gly	Pro	Val	Leu	Trp	Glu	Ala	Arg
		115					120						125		
Ala	Glu	Pro	Trp	Ala	Thr	Trp	Val	Pro	Leu	Leu	Cys	Phe	Val	Leu	His
	130					135					140				
Val	Ile	Ser	Trp	Leu	Leu	Ile	Phe	Ser	Ile	Leu	Leu	Val	Phe	Asp	Tyr
145					150					155				160	
Ala	Glu	Leu	Met	Gly	Leu	Lys	Gln	Val	Tyr	Tyr	His	Val	Leu	Gly	Leu
			165					170						175	
Gly	Glu	Pro	Leu	Ala	Leu	Lys	Ser	Pro	Arg	Ala	Leu	Arg	Leu	Phe	Ser
		180						185					190		
His	Leu	Arg	His	Pro	Val	Cys	Val	Glu	Leu	Leu	Thr	Val	Leu	Trp	Val
		195					200						205		
Val	Pro	Thr	Leu	Gly	Thr	Asp	Arg	Leu	Leu	Leu	Ala	Phe	Leu	Leu	Thr
	210					215					220				
Leu	Tyr	Leu	Gly	Leu	Ala	His	Gly	Leu	Asp	Gln	Gln	Asp	Leu	Arg	Tyr
225					230					235				240	
Leu	Arg	Ala	Gln	Leu	Gln	Arg	Lys	Leu	His	Leu	Leu	Ser	Arg	Pro	Gln
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<210> 5809

<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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 2009

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 <211> 52  
 <212> PRT  
 <213> Homo sapiens

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 His Pro Thr Pro  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5812

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5812

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			20					25					30		
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
		35					40					45			
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Thr	Leu	Gln	Glu	Leu	Leu	Ala	Arg	Asp	Thr	Val	Gln	Val	Glu	Leu	Ile
65				70					75					80	
Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
			85					90					95		
Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
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145              150              155              160
Pro Leu Phe Ser Glu Asp Val Val Leu Lys Leu Phe Leu Ser Phe Ser
      165              170              175
Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly
      180              185              190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu
      195              200              205
Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg
      210              215              220
Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile
225              230              235              240
Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys
      245              250              255
Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala
      260              265              270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly
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Leu Ser Val Glu Phe Ala Leu Leu Ala Asp Lys Ala Ala Gln Gln Gly
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Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp
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Gln Leu Glu Ser Arg Ile Val Glu Gln Glu Asn Ala Ile Gln Thr Met
      370              375              380
Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln
385              390              395              400
Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe
      405              410              415
Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn
      420              425              430
Asp Leu Arg Pro Lys Leu Ser Cys Leu Phe Ala Gly Pro His Ser Thr
      435              440              445
Leu Thr Pro Pro Cys Ser Pro Pro Glu Asp Gly Leu Cys Pro His
      450              455              460

```

&lt;210&gt; 5813

&lt;211&gt; 2991

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5813

```

nttgatgtat gtaattgatc actttatttaa ctggcaaaaa gaagccttgt tgagggtgata
60
aaccgaactt cattacatcc tgtatgtcga gagcaaacac attgggacgt ggctgatggg
120

```



ttcccatttc aaggctgatt ctgatgatga taatgtttta gtagcattga ttgttctcta  
180  
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240  
tgtatgctct accatccaga caagcacaga gacccagagc tcaagtcaca ggcggaacga  
300  
ctgtttaacc ttgttcacca ggcttatgaa gtgcttagtg acccccaaac cagggccatc  
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420  
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660  
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1620  
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1680  
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1740

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 1800  
 gccgccctgt agttcttggc tgggtctgga ggtgtctgtg gagcaccctg ccctcaccac  
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 aacaaacggg tttggaaatt agtcgtcttt tttccccact ccagagcgtg ctcaagtcac  
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 2760  
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 2820  
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 2991

&lt;210&gt; 5814

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5814

Ala	Ser	Ser	Glu	Glu	Leu	Lys	Ala	Ala	Tyr	Arg	Arg	Leu	Cys	Met	Leu
1				5					10				15		
Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala	Glu
			20					25				30			
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

```

      35      40      45
Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
  50      55      60
Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
  65      70      75      80
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
      85      90      95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
      100      105      110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
      115      120      125
Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
      130      135      140
Val Ser His Glu His
145

```

&lt;210&gt; 5815

&lt;211&gt; 590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5815

```

ttcatccagg ctgctcttgg ggatcagcca cgtgatatcc tttgtggggc agctgatgaa
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120
ctgctgctgg gtcaaacaga tgataccaga taccatgtgc tagtgaacct gggcctcccg
180
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240
cagagtataa cccttcatct tgttgatgtc atgccgggtcc tcatcacgct ttcttcgctt
300
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360
gccctccagc ttccaacaa gggacagcac ctctcctgtg ggttcatccc ggcgggtccg
420
gtcaatgaga gaacggtcag cttggagcac aagattcgag ttcgccttgt actcgtattg
480
cagactacgg gcggttacat ccgccatggc cgcggctgct cggaggcttc agaccaccac
540
gcctccatac cgcaagctgc aaacggccgc agatctctgc tctggcgcc
590

```

&lt;210&gt; 5816

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5816

```

Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly
  1      5      10      15
Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp
      20      25      30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

```

```
<210> 5818
<211> 191
<212> PRT
```

<213> Homo sapiens

<400> 5818

```

Met Gly Gln Leu Gln Asn Lys Glu Asn Asn Asn Thr Lys Asp Ser Pro
1          5          10          15
Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser
20          25          30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
35          40          45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
50          55          60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65          70          75          80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
85          90          95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
100         105         110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
115         120         125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
130         135         140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145         150         155         160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
165         170         175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
180         185         190

```

<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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120
cgctctgcct tgcagctctt ctggaccgag gagcccaaag ccctaccctc accattcacc
180
aggctcctgtg ggaagagcag cgtggagggtg ggctgaggtt agaaggtgca gagcgtggaa
240
gaagattgtg agctgagtat tggacatctg ttcttgaata gtccctgggc ctgccatagg
300
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360
aaaattaatc aggtgctgct gttccttctg atcgtgaccc tctgtgtgat tctgtataag
420
aaagttcata aggggactgt gcccaagaat gacgcagatg atgaatccga gactcctgaa
480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag cagggaggat ggggtgccact
540
atggctgcc acaatagcat ctacagcaac cctgacgcca acatcttggt ctatgtagtg
600

```

ggactccgga atactctgac tcgaatacga aaatggattg aacattccaa actgagagaa  
 660  
 ataaacttta aaatcgtgga attcaaccg atggctctca aagggaagat cagaccagac  
 720  
 tcatcgaggc ctgaattgct ccagcctctg aactttgttc gattttatct ccctctactt  
 780  
 atccaccaac acgagaaagt catctatttg gacgatgatg taattgtaca aggtgatatc  
 840  
 caagaactgt atgacaccac cttggccctg ggccacgcgg cggctttctc agatgactgc  
 900  
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 1020  
 ttcaatcctg gtgtgattgt tgccaacatg acagaatgga agcaccagcg catcaccaag  
 1080  
 caattggaga aatggatgca aaagaatgtg gagtacgtga aggccttctc accatttttt  
 1140  
 ccatgcttgg aaacaaaatc attcaattaa tttccacac atagttcaag ggtagaaat  
 1200  
 atttcacagt catctcaggt cagattttct tacagaggca atgttaagaa agaaaagggg  
 1260  
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 1320  
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 1380  
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 1440  
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 1500  
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 1560  
 tatcccatca ttgtattgcc tagcagtcct gtgtatctgg atattttaat accatcataa  
 1620  
 ccttgaattt gcaagtaaag ttattctaaa ta  
 1652

&lt;210&gt; 5820

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5820

Met	Ala	Leu	Leu	Arg	Lys	Ile	Asn	Gln	Val	Leu	Leu	Phe	Leu	Leu	Ile
1				5					10					15	
Val	Thr	Leu	Cys	Val	Ile	Leu	Tyr	Lys	Lys	Val	His	Lys	Gly	Thr	Val
			20					25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
		35					40					45			
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
		50				55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
65					70					75				80	
Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

```
<210> 5821
<211> 3292
<212> DNA
<213> Homo sapiens
```

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<400> 5821
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cgagaccagc ctggtcaaca tagcgagact tcgtcactag aaaaaattta aaaaattttt
120
taaaaaggaa aaaatataac ttagagcccc ctatgaaaaa ctaaattagc atcatgacag
180
gatacacttt ggggagtgaa atttcacagt acctttattt aattccaagc catagagcct
240
ggtaatatatt ttctctttat cagctgtggc actaaaataa cagtggattt tttccctcta
300
gacattcttc ttttggccga tgaaaaattt gacttcgac tcctcattgtc ttcttcgagt
360
gcaaatgaag atgatgaagt cttcttcgga ccctttggac ataaagaaag atgtattgct
420
gccagcttgg aattaaataa tccggttccc gaacagcctc cgttgcccac atctgagagt
480
ccctttgcct ggagccctct ggccggggag aagttcgtgg aggtgtacaa agaagctcac
540
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600
gaagaccctc ggagccaggg cgtggaaaga ttcatacagg agtcaaaaatt aaaaataaac
660

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ctcttttgaga aagaaaagga aatgaagaaa agccccacgt ctcttaaaag ggagacatac  
 720  
 tacctgtcag acagccccctt gctggggccc cctgtgggtg agcctcggct cttggcctcc  
 780  
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 840  
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 960  
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 1020  
 aaaatcccag ctgagaagga atcccaccgg gatgttctcc ctgacaaacc tgccccgggt  
 1080  
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 1140  
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 1200  
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 1320  
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 1980  
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 2880  
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 2940  
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 3060  
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 3120  
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 3180  
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 caatataaat tgatgtcagt gcaggcccg cccgccccca gatacactag tt  
 3292

&lt;210&gt; 5822

&lt;211&gt; 712

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5822

Ile	Leu	Leu	Leu	Ala	Asp	Glu	Lys	Phe	Asp	Phe	Asp	Leu	Ser	Leu	Ser
1				5				10						15	
Ser	Ser	Ser	Ala	Asn	Glu	Asp	Asp	Glu	Val	Phe	Phe	Gly	Pro	Phe	Gly
			20					25					30		
His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
		35					40					45			
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
	50					55					60				
Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
65					70					75				80	
Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
			85					90						95	
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

4986

530	535	540
Ser Ala Met Arg Thr	Glu Pro Thr Arg Glu Ser	Asn Arg Lys Thr Asp
545	550	555
Ser Arg Leu Val Asp	Val Ser Pro Asp Arg Gly Ser	Pro Pro Ser Arg
565	570	575
Val Pro Gln Ala Leu	Asn Phe Ser Pro Glu Glu Ser	Asp Ser Thr Phe
580	585	590
Ser Lys Ser Thr Ala	Thr Glu Val Ala Arg Glu Glu	Ala Lys Pro Gly
595	600	605
Gly Asp Ala Ala Pro	Ser Glu Ala Leu Leu Val Asp	Ile Lys Leu Glu
610	615	620
Pro Leu Ala Val Thr	Pro Asp Ala Ala Ser Gln	Pro Leu Ile Asp Leu
625	630	635
Pro Leu Ile Asp Phe	Cys Asp Thr Pro Glu Ala His	Val Ala Val Gly
645	650	655
Ser Glu Ser Arg Pro	Leu Ile Asp Leu Met Thr	Asn Thr Pro Asp Met
660	665	670
Asn Lys Asn Val Ala	Lys Pro Ser Pro Val Val Gly	Gln Leu Ile Asp
675	680	685
Leu Ser Ser Pro Leu	Ile Gln Leu Ser Pro Glu Ala	Asp Lys Glu Asn
690	695	700
Val Asp Ser Pro Leu	Leu Lys Phe	
705	710	

&lt;210&gt; 5823

&lt;211&gt; 2585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5823

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60
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<400> 5830

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Arg	Cys	Val	Leu	Leu	Leu	Gly	Cys	Leu	His	Leu	Gly	Arg	Pro	Gly	Ala	20	25	30	
Pro	Gly	Asp	Ala	Ala	Leu	Pro	Glu	Pro	Asn	Val	Phe	Leu	Ile	Phe	Ser	35	40	45	
His	Gly	Leu	Gln	Gly	Cys	Leu	Glu	Ala	Gln	Gly	Gly	Gln	Val	Arg	Val	50	55	60	
Thr	Pro	Ala	Cys	Asn	Thr	Ser	Leu	Pro	Ala	Gln	Arg	Trp	Lys	Trp	Val	65	70	75	80
Ser	Arg	Asn	Arg	Leu	Phe	Asn	Leu	Gly	Thr	Met	Gln	Cys	Leu	Gly	Thr	85	90	95	
Gly	Trp	Pro	Gly	Thr	Asn	Thr	Thr	Ala	Ser	Leu	Gly	Met	Tyr	Glu	Cys	100	105	110	
Asp	Arg	Glu	Ala	Leu	Asn	Leu	Arg	Trp	His	Cys	Arg	Thr	Leu	Gly	Asp	115	120	125	
Gln	Leu	Ser	Leu	Leu	Leu	Gly	Ala	Arg	Thr	Ser	Asn	Ile	Ser	Lys	Pro	130	135	140	
Gly	Thr	Leu	Glu	Arg	Gly	Asp	Gln	Thr	Arg	Ser	Gly	Gln	Trp	Arg	Ile	145	150	155	160
Tyr	Gly	Ser	Glu	Glu	Asp	Leu	Cys	Ala	Leu	Pro	Tyr	His	Glu	Val	Tyr	165	170	175	
Thr	Ile	Gln	Gly	Asn	Ser	His	Gly	Lys	Pro	Cys	Thr	Ile	Pro	Phe	Lys	180	185	190	
Tyr	Asp	Asn	Gln	Trp	Phe	His	Gly	Cys	Thr	Ser	Thr	Gly	Arg	Glu	Asp	195	200	205	
Gly	His	Leu	Trp	Cys	Ala	Thr	Gln	Asp	Tyr	Gly	Lys	Asp	Glu	Arg		210	215	220	
Trp	Gly	Phe	Cys	Pro	Ile	Lys	Ser	Asn	Asp	Cys	Glu	Thr	Phe	Trp	Asp	225	230	235	240
Lys	Asp	Gln	Leu	Thr	Asp	Ser	Cys	Tyr	Gln	Phe	Asn	Phe	Gln	Ser	Thr	245	250	255	
Leu	Ser	Trp	Arg	Glu	Ala	Trp	Ala	Ser	Cys	Glu	Gln	Gln	Gly	Ala	Asp	260	265	270	
Leu	Leu	Ser	Ile	Thr	Glu	Ile	His	Glu	Gln	Thr	Tyr	Ile	Asn	Gly	Leu	275	280	285	
Leu	Thr	Gly	Tyr	Ser	Ser	Thr	Leu	Trp	Ile	Gly	Leu	Asn	Asp	Leu	Asp	290	295	300	
Thr	Ser	Gly	Gly	Trp	Gln	Trp	Ser	Asp	Asn	Ser	Pro	Leu	Lys	Tyr	Leu	305	310	315	320
Asn	Trp	Glu	Ser	Asp	Gln	Pro	Asp	Asn	Pro	Ser	Glu	Glu	Asn	Cys	Gly	325	330	335	
Val	Ile	Arg	Thr	Glu	Ser	Ser	Gly	Gly	Trp	Gln	Asn	Arg	Asp	Cys	Ser	340	345	350	
Ile	Ala	Leu	Pro	Tyr	Val	Cys	Lys	Lys	Lys	Pro	Asn	Ala	Thr	Ala	Glu				

355 360 365  
 Pro Thr Pro Pro Asp Arg Trp Ala Asn Val Lys Val Glu Cys Glu Pro  
 370 375 380  
 Ser Trp Gln Pro Phe Gln Gly His Cys Tyr Arg Leu Gln Ala Glu Lys  
 385 390 395 400  
 Arg Ser Trp Gln Glu Ser Lys Lys Ala Cys Leu Arg Gly Gly Gly Asp  
 405 410 415  
 Leu Val Ser Ile His Ser Met Ala Glu Leu Glu Phe Ile Thr Lys Gln  
 420 425 430  
 Ile Lys Gln Glu Val Glu Glu Leu Trp Ile Gly Leu Asn Asp Leu Lys  
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 Leu Gln Met Asn Phe Glu Trp Ser Asp Gly Ser Leu Val Ser Phe Thr  
 450 455 460  
 His Trp His Pro Phe Glu Pro Asn Asn Phe Arg Asp Ser Leu Glu Asp  
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 Asp Gln Pro Gly Tyr Ser Arg Gly Gly Cys Val Ala Leu Ala Thr Gly  
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 Pro Gly Pro Asp Pro Thr Pro Ser Leu Thr Gly Ser Cys Pro Gln Gly  
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 Trp Ala Ser Asp Thr Lys Leu Arg Tyr Cys Tyr Lys Val Phe Ser Ser  
 675 680 685  
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 Gln Glu Leu Gly Ala Gln Leu Leu Ser Leu Ala Ser Tyr Glu Glu Glu  
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 740 745 750  
 Pro Arg Gly Gly Gln Ser Trp Arg Trp Ser Asp Gly Val Gly Phe Ser  
 755 760 765  
 Tyr His Asn Phe Asp Arg Ser Arg His Asp Asp Asp Ile Arg Gly  
 770 775 780  
 Cys Ala Val Leu Asp Leu Ala Ser Leu Gln Trp Val Ala Met Gln Cys

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Arg Glu Pro Asp Asp Ser Pro Gln Gly Arg Arg Glu Trp Leu Arg Phe
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Gln Glu Ala Glu Tyr Lys Phe Phe Glu His His Ser Thr Trp Ala Gln
      835          840          845
Ala Gln Arg Ile Cys Thr Trp Phe Gln Ala Glu Leu Thr Ser Val His
      850          855          860
Ser Gln Ala Glu Leu Asp Phe Leu Ser His Asn Leu Gln Lys Phe Ser
865          870          875          880
Arg Ala Gln Glu Gln His Trp Trp Ile Gly Leu His Thr Ser Glu Ser
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Asp Gly Arg Phe Arg Trp Thr Asp Gly Ser Ile Ile Asn Phe Ile Ser
      900          905          910
Trp Ala Pro Gly Lys Pro Arg Pro Val Gly Lys Asp Lys Lys Cys Val
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Tyr Met Thr Ala Ser Arg Glu Asp Trp Gly Asp Gln Arg Cys Leu Thr
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Ala Leu Pro Tyr Ile Cys Lys Arg Ser Asn Val Thr Lys Glu Thr Gln
945          950          955          960
Pro Pro Asp Leu Pro Thr Thr Ala Leu Gly Gly Cys Pro Ser Asp Trp
      965          970          975
Ile Gln Phe Leu Asn Lys Cys Phe Gln Val Gln Gly Gln Glu Pro Gln
      980          985          990
Ser Arg Val Lys Trp Ser Glu Ala Gln Phe Ser Cys Glu Gln Gln Glu
      995          1000          1005
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Ala Ser Leu Pro Asn Val Thr Phe Asp Leu Trp Ile Gly Leu His Ala
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Ser Gln Arg Asp Phe Gln Trp Val Glu Gln Glu Pro Leu Met Tyr Ala
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Asn Trp Ala Pro Gly Glu Pro Ser Gly Pro Ser Pro Ala Pro Ser Gly
      1060          1065          1070
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Phe Thr Gly Arg Trp Asp Asp Arg Ser Cys Thr Glu Glu Thr His Gly
1090          1095          1100
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Phe Arg Leu Leu Gln Lys Pro Leu Arg Trp His Asp Ala Leu Leu Leu
      1140          1145          1150
Cys Glu Ser His Asn Ala Ser Leu Ala Tyr Val Pro Asp Pro Tyr Thr
      1155          1160          1165
Gln Ala Phe Leu Thr Gln Ala Ala Arg Gly Leu Arg Thr Pro Leu Trp
1170          1175          1180
Ile Gly Leu Ala Gly Glu Glu Gly Ser Arg Arg Tyr Ser Trp Val Ser
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Glu Glu Pro Leu Asn Tyr Val Gly Trp Gln Asp Gly Glu Pro Gln Gln
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Pro Gly Gly Cys Thr Tyr Val Asp Val Asp Gly Ala Trp Arg Thr Thr

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 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu  
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 <213> Homo sapiens

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2040



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<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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Arg	Arg	Ala	Arg	Pro	Lys	Phe	Glu	Gln	Val	Asn	Leu	Leu	Asp	Ser	Asn
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Ala	Val	His	His	Ile	Ile	His	Asp	Phe	Gln	Pro	His	Val	Ile	Val	His
65				70					75						80
Cys	Ala	Ala	Glu	Arg	Arg	Pro	Asp	Val	Val	Glu	Asn	Gln	Pro	Asp	Ala
				85				90						95	
Ala	Ser	Gln	Leu	Asn	Val	Asp	Ala	Ser	Gly	Asn	Leu	Ala	Lys	Glu	Ala
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Ala	Ala	Val	Gly	Ala	Phe	Leu	Ile	Tyr	Ile	Ser	Ser	Asp	Tyr	Val	Phe
		115					120					125			
Asp	Gly	Thr	Asn	Pro	Pro	Tyr	Arg	Glu	Glu	Asp	Ile	Pro	Ala	Pro	Leu
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Asn	Leu	Tyr	Gly	Lys	Thr	Lys	Leu	Asp	Gly	Glu	Lys	Ala	Val	Leu	Glu
145				150					155						160
Asn	Asn	Leu	Gly	Ala	Ala	Val	Leu	Arg	Ile	Pro	Ile	Leu	Tyr	Gly	Glu
			165					170						175	
Val	Glu	Lys	Leu	Glu	Glu	Ser	Ala	Val	Thr	Val	Met	Phe	Asp	Lys	Val
		180						185					190		
Gln	Phe	Ser	Asn	Lys	Ser	Ala	Asn	Met	Asp	His	Trp	Gln	Gln	Arg	Phe
		195					200					205			
Pro	Thr	His	Val	Lys	Asp	Val	Ala	Thr	Val	Cys	Arg	Gln	Leu	Ala	Glu
		210				215					220				
Lys	Arg	Met	Leu	Asp	Pro	Ser	Ile	Lys	Gly	Thr	Phe	His	Trp	Ser	Gly
225				230						235					240
Asn	Glu	Gln	Met	Thr	Lys	Tyr	Glu	Met	Ala	Cys	Ala	Ile	Ala	Asp	Ala
			245					250						255	
Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val
		260						265					270		
Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
		275					280					285			
Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys
		290			295					300					
Glu	Ser	Leu	Trp	Pro	Phe	Leu	Ile	Asp	Lys	Arg	Trp	Arg	Gln	Thr	Val
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Phe	His														

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 <212> DNA  
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<210> 5834  
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 35 40 45  
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val  
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Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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Gly	Leu	Gly	Val	Cys	Thr	Tyr
65			70		75	
Tyr	Leu	Ala	Ser	Arg	Asp	Pro
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 1200

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 1440  
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 Leu Lys Ala Ala Met Gln Glu Ala Arg Gly Leu Gln Phe Val Trp Arg  
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 Ser Gly Phe Tyr Trp Asn Gly Val Ala Val Phe Pro Lys Pro Pro Pro  
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 Asp Gly Val Tyr Pro Asn Met Ser Glu Pro Val Thr Pro Ala Asn Ile  
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 Asn Leu Tyr Ala Glu Ala Leu Val Ala Asn Val Lys Gln Arg Ala Ala  
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 Phe Phe Asn Ala Ser Val Gln Phe Ala Asn Met Asp Pro Leu Leu Asp

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His	Ile	Asn	Ser	His	Ala	Ala	Glu	Leu	Gly	Val	Ser	Val	Gln	Tyr	Ala	
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Thr	Leu	Gly	Asp	Tyr	Phe	Arg	Ala	Leu	His	Ala	Leu	Asn	Val	Thr	Trp	
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Arg	Val	Arg	Asp	His	His	Asp	Phe	Leu	Pro	Tyr	Ser	Thr	Glu	Pro	Phe	
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Leu	Gln	Gln	Leu	Gln	Gln	Leu	Arg	Trp	Ala	Val	Ser	Glu	Val	Gln	His	
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Ser	Ile	Val	Leu	Asp	Glu	Leu	Gln	Pro	Gln	Ala	Pro	Met	Ala	Ala	Ser	
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Val Leu Leu Ser Glu Arg Ala His Gly Ile Ser Ser Gln Gly Asn Gly		
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Gln Val Glu Val Met Leu His Arg Arg Leu Trp Asn Asn Phe Asp Trp		
	660	665
Asp Leu Gly Tyr Asn Leu Thr Leu Asn Asp Thr Ser Val Val His Pro		
	675	680
Val Leu Trp Leu Leu Leu Gly Ser Trp Ser Leu Thr Thr Ala Leu Arg		
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Gln Arg Ser Ala Leu Ala Leu Gln His Arg Pro Val Val Leu Phe Gly		
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Asp Leu Ala Gly Thr Ala Pro Lys Leu Pro Gly Pro Gln Gln Gln Glu		
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Ala Val Thr Leu Pro Pro Asn Leu His Leu Gln Ile Leu Ser Ile Pro		
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Gly Trp Arg Tyr Ser Ser Asn His Thr Glu His Ser Gln Asn Leu Arg		
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Lys Gly His Arg Gly Glu Ala Gln Ala Asp Leu Arg Arg Val Leu Leu		
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&lt;210&gt; 5845

&lt;211&gt; 2762

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5845

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 <212> PRT  
 <213> Homo sapiens

<400> 5846  
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 Leu Ser Glu Gln Tyr Ser Gln Lys Cys Leu Glu Ile Gly Ala Leu Met  
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 Arg Gln Ala Glu Glu Arg Glu His Thr Leu Arg Arg Cys Gln Gln Glu  
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 Gly Gln Glu Leu Leu Arg His Asn Gln Glu Leu His Gly Arg Leu Ser  
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 180 185 190  
 Gln Cys Leu Arg Asp Glu Leu Gln Met Met Gln Lys Asp Lys Arg Phe  
 195 200 205  
 Thr Ser Gly Lys Tyr Gln Asp Val Tyr Val Glu Leu Ser His Ile Lys

210		215		220
Thr Arg Ser Glu Arg Glu Ile Glu Gln Leu Lys Glu His Leu Arg Leu				
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<210> 5847  
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 <212> DNA  
 <213> Homo sapiens

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<210> 5848  
 <211> 120  
 <212> PRT

<213> Homo sapiens

<400> 5848

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      20           25           30
Leu Ser Arg His Thr Val Lys Pro Arg Ala Leu Ser Thr Phe Leu Phe
      35           40           45
Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
      50           55           60
Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
      65           70           75           80
Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
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Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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840

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&lt;210&gt; 5850

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5850

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&lt;210&gt; 5851

&lt;211&gt; 488

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5851

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488

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&lt;210&gt; 5852

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5852

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Met Trp Lys Gly Leu Val Lys Arg Asn Ala Ser Val Glu Thr Val Asp
1           5           10           15
Asn Lys Thr Ser Glu Asp Val Thr Met Ala Ala Ala Ser Pro Val Thr
20           25           30
Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
35           40           45
Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
50           55           60
Asp Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser
65           70           75           80
Glu Met

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&lt;210&gt; 5853

&lt;211&gt; 487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5853

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60
agacgggtctc aagagggagg ccagcccgt cccgcggccc ctgacacccc atcaggccgc
120
tcaggcccag cagctccatg gaggacgccc gcgaggaccc caccacgttt gctgcccact
180

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ctctgcccag tgacccccgt ctcttggcca ctgtgaccaa cgcatacctg ggcacacgag  
 240  
 tgttttcacga cacgctgcac gtgagcggcg tgtacaatgg ggctggcggg gacacgcacc  
 300  
 gggccatgct gcccagcccc ctcaacgtcc ggctggaggc ccccgagggg atgggggagc  
 360  
 agctgaccga gaccttcgcc ctggacacca acacaggctc ctttcttcac accctggagg  
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 480  
 ctttccg  
 487

<210> 5854  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens

<400> 5854  
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 1 5 10 15  
 Tyr Arg Arg Ser Gln Glu Gly Gly Pro Ala Arg Pro Ala Ala Pro Asp  
 20 25 30  
 Thr Pro Ser Gly Arg Ser Gly Pro Ala Ala Pro Trp Arg Thr Pro Ala  
 35 40 45  
 Arg Thr Pro Pro Arg Leu Leu Pro Thr Leu Cys Pro Val Thr Pro Val  
 50 55 60  
 Ser Trp Pro Leu  
 65

<210> 5855  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

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 tcctcccgcac cctcccgag gcacctgctg ggggctgtgg ggcccaaagc gggagggagt  
 180  
 taacgagggtt gttgcagaag tcctcctggc ggcacacgaa ggtgtaggag atcagggaga  
 240  
 ggccggggcc catccggtgc tcagtacgc ggggctcctg gtccttgccc tccgtgcagc  
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 360  
 an  
 362

<210> 5856  
 <211> 113  
 <212> PRT



<213> Homo sapiens

<400> 5856

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Met Glu Pro Ala Arg Val Gly Ile Ala Ser Glu Gly Gly Arg Asp Ser
 1           5           10           15
Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
      20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
      35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
      50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
      85           90           95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
      100           105           110
Ala

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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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120
cgggggcgac cgtcccgggg cgggccgccc aagctgcagc gcaactctcg cggcggccag
180
ggccgaggtg gggagaagcc cccgcacctg gcagccctaa ttctggcccg gggaggcagc
240
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300
ctgcgtgcgg ccctggattc aggggccttc cagagtgtat gggtttcgac agaccatgat
360
gaaattgaga atgtggccaa acaatttggt gcacaagttc atcgaagaag ttctgaagtt
420
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480
gttgacattg taggaaatat tcaagctact tctccatggt tacatcctac tgatcttcaa
540
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600
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660
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720
tcattttatt ttgctaaaag acatttgata gagatggggt acttgcaggg tggaaaaatg
780
gcatactacg aaatgcgagc tgaacatagt gtggatatag atgtggatat tgattggcct
840

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attgcagagc aaagagtatt aagatatggc tattttggca aagagaagct taaggaaata  
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 960  
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 1020  
 aaaagtggta ttgaggtgag gctaattctca gaaagggcct gttcaaagca gacgctgtct  
 1080  
 tctttaaaac tggattgcaa aatggaagtc agtgtatcag acaagctagc agttgtagat  
 1140  
 gaatggagaa aagaaatggg cctgtgctgg aaagaagtgg catatcttgg aaatgaagtg  
 1200  
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 1320  
 gaatttgcag agcacatttg cctactaatg gaaaagggtta ataattcatg ccaaaaatag  
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 1500  
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 1560  
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 ccctgtaaaa ctgtgtgttt gtgtgctttc aaagatgttg ggattttatt tatctgggga  
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 1740  
 aaaaaaaaaa a  
 1751

<210> 5858  
 <211> 434  
 <212> PRT  
 <213> Homo sapiens

<400> 5858  
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 20 25 30  
 Gly Gly Gln Gly Arg Gly Gly Glu Lys Pro Pro His Leu Ala Ala Leu  
 35 40 45  
 Ile Leu Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys  
 50 55 60  
 His Leu Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu  
 65 70 75 80  
 Asp Ser Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu  
 85 90 95  
 Ile Glu Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser  
 100 105 110  
 Ser Glu Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu

115 120 125  
 Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala  
 130 135 140  
 Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met  
 145 150 155 160  
 Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His  
 165 170 175  
 Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu  
 180 185 190  
 Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp  
 195 200 205  
 Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu  
 210 215 220  
 Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met  
 225 230 235 240  
 Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile  
 245 250 255  
 Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu  
 260 265 270  
 Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn  
 275 280 285  
 Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp  
 290 295 300  
 Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu  
 305 310 315 320  
 Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser  
 325 330 335  
 Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala  
 340 345 350  
 Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val  
 355 360 365  
 Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val  
 370 375 380  
 Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala  
 385 390 395 400  
 Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu  
 405 410 415  
 Phe Ala Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys  
 420 425 430  
 Gln Lys

&lt;210&gt; 5859

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5859

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aaatatatat ataaaaaaaa taataagaca attacagcac taaaccaggc accttcgacc  
 120

aaatcacaac ctctcttttg attccccttc acgctaagcc tctttcaa at tctttttcct  
 180

gagctggaag accagtcaga tgcccgagg gtcagcgcca agcacattcc caaccgggca  
240  
actgtgtacc tttctctagg agtgcacgac acccttcccc cacaactcct tgttttaaag  
300  
gatttaaccc attaggaagc ccatgtttca atctaagcca gaaggagctg cgggacaagg  
360  
cagtcttcac tttgaaggtc cctttcctgc tccagtcctt gggctagggt tctagaagag  
420  
gctggctgcc acgtttacat gaggccaccg aagatctaag tccagctaag cccagggagg  
480  
ctcctgcaa ggctgggacc tggggtgctg cgtcctcaac cctctcggtg accacggctc  
540  
aaaggagaga cctcaagggt gccaggagca cagggtgcctg ggctgcattc caggaaagag  
600  
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660  
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720  
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780  
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840  
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900  
gcaacaacaa ctacatcatt tttggcattt taacatggag acagtgacaa gtggtaacaa  
960  
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1020  
cacacttaag ttctagtccc atctccccc taagcaccac tgaactaaat atctatttta  
1080  
aagcacccaa accagtccag accctctgga aaccaagagc cccagccaca gctgtcgcct  
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gcacacacgg cggcgagctc gggcacttga cggggacacg ggtggcagtc acggcatccg  
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1320  
caaacgtgac taaaggagc tgggtcagca gaacggtagc ccgagtctca gcaacaggat  
1380  
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1740  
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1800

cctaggccca tctgcaagaa aaagcggaga aggagtgacc cggatgcttc cgaagcacgc  
 1860  
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 1920  
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 1980  
 tgctaattgt aactggaaaag ggggtgttttg gggagtgtat tcaggagagg aagaaagaaa  
 2040  
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 2100  
 ggtaaataca ctatgagcaa gtattttaat tcaacattaa gggaaaaaaaa aggactttgg  
 2160  
 aaagcataca gaaaaaaaaag tagttaacgt tggatcatgt gtaaaacgga acctcagggg  
 2220  
 gtctaaacaa aaatgcacct tcgggtcaact tttgcttttt taaattt  
 2267

<210> 5860  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 5860  
 Met Glu Glu Glu Ser Pro Phe Thr Gln Lys Lys Cys Pro Leu Gln Glu  
 1 5 10 15  
 Pro Ala Ala Ala Arg Gln Ser Pro Ala Arg Leu His Pro Lys Ser Arg  
 20 25 30  
 Ser Arg Ala Ser Glu Ala Ser Gly Ser Leu Leu Leu Arg Phe Phe Leu  
 35 40 45  
 Gln Met Gly Leu Gly Arg Cys Arg Phe Cys Phe Ser Pro Trp Leu Pro  
 50 55 60  
 Val Arg Pro Gln Pro Ser Gly Cys Asp Ile Ile Glu Ser Ala Val Ser  
 65 70 75 80  
 Pro Leu Val Gly Asp Trp Gly Ser Val Phe Ser His Leu Tyr Leu Leu  
 85 90 95

<210> 5861  
 <211> 1951  
 <212> DNA  
 <213> Homo sapiens

<400> 5861  
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 120  
 cttgtgaggc ccaaggctgg ccagacactg cagcagaggg ttttccagat cctagacagt  
 180  
 aagctatttg agaaagtcaa agaagtttgt ccaaattgtgc atgagaagat cagagctatt  
 240  
 tatgcagatc tcaatcagaa tgactttgcc atcagcaaag aggacatgca ggagctttctc  
 300  
 tcctgtacaa acataatatt tcaactgtgca gccactgtac gctttgacga cactctcaga  
 360

catgctgtgc aacttaacgt cactgccacc cggcagctct tgcttatggc tagtcagatg  
420  
ccaaagctgg aagcctttat acatatctct actgcctatt caaattgtaa cctgaagcac  
480  
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540  
gagtggtag acgatgctat tattgacgag attacacca agctgatcag agattggccc  
600  
aatatttata cctacaccaa ggccttggga gaaatggtgg tgcagcaaga gagcaggaac  
660  
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720  
ggttgggttg ataataaaa tggacctaata ggaatcatta ttgcgactgg gaaagggttt  
780  
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840  
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1080  
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1800  
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1860  
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1920  
cagtactaac cttggaacca ttctgggtac c  
1951

<210> 5862  
 <211> 514  
 <212> PRT  
 <213> Homo sapiens

<400> 5862  
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 Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln  
 35 40 45  
 Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu  
 50 55 60  
 Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile  
 65 70 75 80  
 Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met  
 85 90 95  
 Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr  
 100 105 110  
 Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr  
 115 120 125  
 Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu  
 130 135 140  
 Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His  
 145 150 155 160  
 Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile  
 165 170 175  
 Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr  
 180 185 190  
 Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala  
 195 200 205  
 Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala  
 210 215 220  
 Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro  
 225 230 235 240  
 Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr  
 245 250 255  
 Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala  
 260 265 270  
 Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly  
 275 280 285  
 Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile  
 290 295 300  
 Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln  
 305 310 315 320  
 Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg  
 325 330 335  
 Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn  
 340 345 350  
 Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg  
 355 360 365  
 Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

370		375		380
Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu Trp				
385		390		395
Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu Asp				400
	405		410	415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr				
	420		425	430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp				
	435		440	445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn				
	450		455	460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu				
465		470		475
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val				480
	485		490	495
Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu				
	500		505	510
Lys Val				

<210> 5863  
 <211> 438  
 <212> DNA  
 <213> Homo sapiens

<400> 5863  
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 120  
 agaagtgccca gtcttaacat tcaactgtttg tgactgattt atagaaaaag gggctggatt  
 180  
 ctggtagccg ggggagccca ggggtgaacac tgaggttcta ccctgttcta gtggttgctt  
 240  
 tgattgatac tcagccatga aagggaacata gctcagatac tgacaaaaca gctttgtatt  
 300  
 tgagtgtgtt tgtccaactg gcaaggaaca gtctggggac aaacagtgcc ttatttggag  
 360  
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 420  
 tgaatcagat tttgtaca  
 438

<210> 5864  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 5864  
 Met Gly Glu Lys Asn Lys Gln Leu Gln Ile Arg His Cys Leu Ser Pro  
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 Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe  
 20 25 30  
 Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys



[illegible]

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<210> 5865
<211> 1229
<212> DNA
<213> Homo sapiens
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<400> 5865
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120
aacaaccagg gcatagtctt aacctttgtg cttcccacgg agcagttcca cttaggcaag
180
attgaggagc ttctcgtgga gagaacaggg gccccattct gctcccctac cagttccgga
240
tgaggagat cgaggggcttc cgctatcgct gcaggtgtcc acccccagga tgccatgcgc
300
tcagtgacta agcaggccat tcggggaggca agattgaagg agatcaagga agagcttctg
360
cattctgaga agcttaagac atactttgaa gacaacccta gggacctcca gctgctgcgg
420
catgacctac ctttgacccc cgcagtgggtg aagccccacc tggggccatgt tcttgactac
480
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 Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln  
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<210> 5867  
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<212> PRT

<213> Homo sapiens

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<210> 5871

<211> 2217

<212> DNA

<213> Homo sapiens

<400> 5871

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<211> 578

<212> PRT

<213> Homo sapiens

<400> 5872

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Phe Val Leu Phe Tyr Ser Lys Phe His Gly Leu Glu Met Cys Val Asp
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&lt;211&gt; 3463

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5873

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&lt;210&gt; 5876

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&lt;400&gt; 5876

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5049

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<211> 227

<212> PRT

<213> Homo sapiens

<400> 5878

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<213> Homo sapiens

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 Gly Ser Gln Lys Lys Lys Arg Thr Ile Leu Gln Phe Leu Thr Asn Tyr  
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 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln  
 65 70 75 80  
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly  
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 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly  
 100 105 110  
 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala  
 115 120 125  
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 Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr  
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      35           40           45
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Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
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<212> DNA

<213> Homo sapiens

<400> 5883

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<213> Homo sapiens

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&lt;210&gt; 5885

&lt;211&gt; 1905

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5885

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&lt;210&gt; 5886

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5886

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&lt;210&gt; 5888

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5888

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Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr
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Glu	Thr	Lys	His	Arg	Val	Ser	Met	Glu	Val	Ala	Ala	Ala	Lys	Gly	Leu
	50				55					60					
Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly	Phe	Thr	Thr
65					70					75				80	
Ala	Val	Lys	Cys	Leu	Arg	Gly	Thr	Val	Ala	Ala	Val	Tyr	Asp	Val	Thr

				85					90					95					
Leu	Asn	Phe	Arg	Gly	Asn	Lys	Asn	Pro	Ser	Leu	Leu	Gly	Ile	Leu	Tyr				
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Gly	Lys	Lys	Tyr	Glu	Ala	Asp	Met	Cys	Val	Arg	Arg	Phe	Pro	Leu	Glu				
		115					120					125							
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Tyr	Gln	Glu	Lys	Asp	Ala	Leu	Gln	Glu	Val	Lys	Thr	Leu	Asp	Gly	Met				
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&lt;210&gt; 5889

&lt;211&gt; 2198

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5889

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&lt;210&gt; 5890

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5890

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Leu	Pro	Leu	Val	Ala	Gly	Arg	Asp	Ser	Leu	Ala	Leu	Phe	Pro	Arg	Leu
			20					25					30		
Glu	Cys	Ser	Gly	Thr	Ile	Thr	Ala	His	Cys	Ser	Leu	Asp	Phe	Pro	Gly
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	50					55					60				
Glu	Glu	Arg	Gln	Gln	His	Gly	Glu	Cys	Pro	Val	Pro	Thr	Pro	Trp	Lys

65				70				75				80
Ala	Val	Pro	Pro	Gly	Ser	Pro	Gly	Val	Gly	Thr	Gln	Cys
				85				90				95
Ala	Leu	Gly	Cys	Pro	Thr	Leu	Gly	Ala	Thr	Ala	Arg	Arg
			100				105					110
Pro	Ala	Phe	His	His	Leu							
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&lt;210&gt; 5891

&lt;211&gt; 1459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5891

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1200

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<210> 5892

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

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Phe	Arg	Asn	Gly	Ala	Val	Tyr	Gly	Ala	Lys	Ile	Arg	Ala	Pro	His	Ala	35	40	45	
Leu	Val	Met	Thr	Phe	Leu	Phe	Arg	Asn	Gly	Ser	Leu	Gln	Glu	Lys	Leu	50	55	60	
Trp	Ala	Ile	Leu	Gln	Ala	Thr	Tyr	Ile	His	Ser	Trp	Asn	Leu	Ala	Arg	65	70	75	80
Phe	Val	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ala	Leu	Gln	Ser	Tyr	Ile	Gln	85	90	95	
Gly	Lys	Thr	Tyr	Pro	Ala	His	Ala	Phe	Leu	Ala	Ala	Phe	Leu	Gly	Gly	100	105	110	
Ile	Leu	Val	Phe	Gly	Glu	Asn	Asn	Asn	Ile	Asn	Ser	Gln	Ile	Asn	Met	115	120	125	
Tyr	Leu	Leu	Ser	Arg	Val	Leu	Phe	Ala	Leu	Ser	Arg	Leu	Ala	Val	Glu	130	135	140	
Lys	Gly	Tyr	Ile	Pro	Glu	Pro	Arg	Trp	Asp	Pro	Phe	Pro	Leu	Leu	Thr	145	150	155	160
Ala	Val	Val	Trp	Gly	Leu	Val	Leu	Trp	Leu	Phe	Glu	Tyr	His	Arg	Ser	165	170	175	
Thr	Leu	Gln	Pro	Ser	Leu	Gln	Ser	Ser	Met	Thr	Tyr	Leu	Tyr	Glu	Asp	180	185	190	
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<210> 5893

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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1389

&lt;210&gt; 5894

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5894

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		20						25					30		
Arg	Arg	Lys	Lys	Lys	Lys	Ala	Lys	Arg	Thr	Thr	Asn	Trp	Lys	Ile	Ile
		35					40					45			
Thr	Asp	Arg	Pro	Gly	Phe	His	Asp	Glu	Ser	Ala	Ile	Tyr	Pro	Val	Gly
		50				55						60			
Tyr	Cys	Ser	Thr	Arg	Ile	Tyr	Ala	Ser	Met	Lys	Cys	Pro	Asp	Gln	Lys
65					70					75					80
Cys	Leu	Tyr	Thr	Cys	Gln	Ile	Lys	Asp	Gly	Gly	Val	Gln	Pro	Gln	Phe
				85					90					95	
Glu	Ile	Val	Pro	Glu	Asp	Asp	Pro	Gln	Asn	Ala	Ile	Val	Ser	Ser	Ser
			100					105					110		
Ala	Asp	Ala	Cys	His	Ala	Glu	Leu	Arg	Thr	Ile	Ser	Thr	Thr	Met	
		115					120					125			
Gly	Lys	Leu	Met	Pro	Asn	Leu	Leu	Pro	Ala	Gly	Ala	Asp	Phe	Phe	Gly
	130					135					140				
Phe	Ser	His	Pro	Ala	Ile	His	Asn	Leu	Ile	Gln	Ser	Cys	Pro	Gly	Ala
145					150					155					160
Arg	Lys	Cys	Ile	Asn	Tyr	Gln	Trp	Val	Lys	Phe	Asp	Val	Cys	Lys	Pro
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Gly	Asp	Gly	Gln	Leu	Pro	Glu	Gly	Leu	Pro	Glu	Asn	Asp	Ala	Ala	Met
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Ser	Phe	Glu	Ala	Phe	Gln	Arg	Gln	Ile	Phe	Asp	Glu	Asp	Gln	Asn	Asp
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Gln	Ser	Ser	Asp												
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&lt;210&gt; 5895

&lt;211&gt; 2748

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5895

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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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Ile	Arg	Ala	Val	Tyr	Pro	Ala	Phe	Asp	Lys	Asn	Asn	Pro	Ser	Asn	Lys
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Leu	Val	Ser	Thr	Ser	Asn	Thr	Val	Thr	Ala	Ala	His	Ile	Lys	Lys	Phe
				85					90					95	
Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
			100					105					110		
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&lt;210&gt; 5898

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5898

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&lt;210&gt; 5900

&lt;211&gt; 345

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5900

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&lt;211&gt; 984

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5901

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<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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&lt;210&gt; 5904

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5904

Met	Ser	Gly	Arg	Val	Gly	Asp	Leu	Ser	Pro	Arg	Gln	Lys	Glu	Ala	Leu
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Ala	Lys	Phe	Arg	Glu	Asn	Val	Gln	Asp	Val	Leu	Pro	Ala	Leu	Pro	Asn
			20					25					30		
Pro	Asp	Asp	Tyr	Phe	Leu	Leu	Arg	Trp	Leu	Arg	Ala	Arg	Ser	Phe	Asp
		35					40					45			
Leu	Gln	Lys	Ser	Glu	Ala	Met	Leu	Arg	Lys	His	Val	Glu	Phe	Arg	Lys
	50					55					60				
Gln	Lys	Asp	Ile	Asp	Asn	Ile	Ile	Ser	Trp	Gln	Pro	Pro	Glu	Val	Ile
65					70					75				80	
Gln	Gln	Tyr	Leu	Ser	Gly	Gly	Met	Cys	Gly	Tyr	Asp	Leu	Asp	Gly	Cys
				85					90					95	
Pro	Val	Trp	Tyr	Asp	Ile	Ile	Gly	Pro	Leu	Asp	Ala	Lys	Gly	Leu	Leu
			100					105					110		
Leu	Ser	Ala	Ser	Lys	Gln	Asp	Met	Ile	Arg	Lys	Gly	Ile	Lys	Val	Cys
		115				120					125				
Glu	Leu	Leu	Leu	His	Glu	Cys	Glu	Leu	Gln	Thr	Gln	Lys	Leu	Gly	Arg
	130					135					140				
Lys	Ile	Glu	Met	Ala	Leu	Met	Val	Phe	Asp	Met	Glu	Gly	Leu	Ser	Leu
145					150				155					160	
Lys	His	Leu	Trp	Lys	Pro	Ala	Val	Glu	Val	Tyr	Gln	Gln	Phe	Phe	Ser

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180
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240
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480
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540
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720
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840

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&lt;210&gt; 5906

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5906

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Glu Ala Ser Gly Leu Arg Phe Asp Phe Ile Pro Asp Val Lys Gly Ala
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Val Leu Val Cys Asp Met Ser Ser Asn Phe Leu Ser Lys Pro Val Asp
          20          25          30
Val Ser Lys Phe Arg Val Ile Phe Ala Gly Ala Gln Lys Asn Val Gly
          35          40          45
Ser Ala Gly Val Thr Val Val Ile Val Arg Asp Asp Leu Leu Gly Phe
          50          55          60
Ala Leu Arg Glu Cys Pro Ser Val Leu Glu Tyr Lys Val Gln Ala Gly
65          70          75          80
Asn Ser Ser Leu Tyr Asn Thr Pro Pro Cys Phe Ser Ile Tyr Val Met
          85          90          95
Gly Leu Val Leu Glu Trp Ile Lys Asn Asn Gly Gly Ala Ala Ala Met
          100         105         110
Glu Lys Leu Ser Ser Ile Lys Ser Leu Thr Ile Tyr Glu Ile Ile Asp
          115         120         125
Asn Ser Gln Gly Phe Tyr Val Cys Pro Val Glu Pro Gln Asn Arg Ser
          130         135         140
Lys Met Asn Ile Pro Phe Arg Ile Gly Asn Ala Lys Gly Asp Asp Ala
145         150         155         160
Leu Glu Lys Arg Phe Leu Asp Lys Ala Leu Glu Leu Asn Met Leu Ser
          165         170         175
Leu Lys Gly His Arg Ser Val Gly Gly Ile Arg Ala Ser Leu Tyr Asn
          180         185         190
Ala Val Thr Ile Glu Asp Val Gln Lys Leu Ala Ala Phe Met Lys Lys
          195         200         205
Phe Leu Glu Met His Gln Leu
          210         215

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&lt;210&gt; 5907

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5907

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1989

&lt;210&gt; 5908

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5908

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          20           25           30
Gln Ile Ala Ala Ser Ala Glu Leu Glu Ser Gly Ala Met Pro Trp Ser
      35           40           45
Leu Leu Gln His Ile Asp Glu Arg Asp Arg Ala Gly Leu Leu Pro Ala
 50           55           60
Leu Phe Lys Val Leu Ser Val Gly Arg Gly Gly Ser Pro Arg Leu Gln
65           70           75           80
Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
          85           90           95
Ala Thr Lys Glu Gly Ile Pro Lys Ser Asn Arg Ser His Leu Tyr Asn
          100           105           110
Thr Val Arg Leu Phe Thr Pro Cys Thr Arg His Lys Gln Ala Pro Gly
          115           120           125
Asp Gln Val Thr Gly Ile Leu Pro Ser Val Glu Leu Leu Phe Asn Leu
          130           135           140
Asp Arg Ile Thr Thr Val Glu His Leu Leu Lys Ser Val Leu Leu Tyr
145           150           155           160
Asn Ile Asn Asn Ser Val Ser Phe Ser Ser Ala Val Lys Cys Val Cys
          165           170           175
Asn Leu Met Ile Lys Glu Pro Lys Ser Ser Ser Arg Thr Leu Gly Arg
          180           185           190
Ala Pro Tyr Ser Phe Thr Phe Asn Ser Gln Phe Glu Phe Gly Lys Lys
          195           200           205
His Lys Trp Ile Gln Ile Asp Val Thr Ser Leu Leu Gln Pro Leu Val
          210           215           220
Ala Ser Asn Lys Arg Ser Ile His Met Ser Ile Asn Phe Thr Cys Met
225           230           235           240
Lys Asp Gln Leu Glu His Pro Ser Ala Gln Asn Gly Leu Phe Asn Met
          245           250           255
Thr Leu Val Ser Pro Ser Leu Ile Leu Tyr Leu Asn Asp Thr Ser Ala
          260           265           270
Gln Ala Tyr His Ser Trp Tyr Ser Leu His Tyr Lys Arg Arg Pro Ser
          275           280           285
Gln Gly Pro Asp Gln Glu Arg Ser Leu Ser Ala Tyr Pro Val Gly Glu
          290           295           300
Glu Ala Ala Glu Asp Gly Arg Ser Ser His His Arg His Arg Arg Gly
305           310           315           320
Gln Glu Thr Val Ser Ser Glu Leu Lys Lys Pro Leu Gly Pro Ala Ser
          325           330           335
Phe Asn Leu Ser Glu Tyr Phe Arg Gln Phe Leu Leu Pro Gln Asn Glu
          340           345           350
Cys Glu Leu His Asp Phe Arg Leu Ser Phe Ser Gln Leu Lys Trp Asp
          355           360           365
Asn Trp Ile Val Ala Pro His Arg Tyr Asn Pro Arg Tyr Cys Lys Gly
          370           375           380
Asp Cys Pro Arg Ala Val Gly His Arg Tyr Gly Ser Pro Val His Thr
385           390           395           400
Met Val Gln Asn Ile Ile Tyr Glu Lys Leu Asp Ser Ser Val Pro Arg

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Glu	Pro	Asp	Gly	Ser	Ile	Ala	Tyr	Lys	Glu	Tyr	Glu	Asp	Met	Ile	Ala				
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	450																		

&lt;210&gt; 5909

&lt;211&gt; 4343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5909

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&lt;210&gt; 5910

&lt;211&gt; 899

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5910

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Cys Leu Gln Lys Ile Pro Gln Glu Arg Pro Thr Ser Ala Glu Leu Leu
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Tyr Arg Lys Met Lys Lys Ile Leu Phe Gln Glu Thr Arg Asn Gly Pro
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Leu Asn Arg Glu Met Asp Ser Leu Gly Ser Asn His Ser Ile Pro Ser
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Met Ser Val Ser Thr Gly Ser Gln Ser Ser Ser Val Asn Ser Met Gln
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Glu Val Met Asp Glu Ser Ser Ser Glu Leu Val Met Met His Asp Asp
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Glu Ser Thr Ile Asn Ser Ser Ser Ser Val Val His Lys Lys Asp His

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Ser Thr Arg Val Glu	Phe Asp Leu Pro Glu Tyr	Ser Val Arg Arg Arg
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Tyr Gln Asp Phe Asp	Trp Leu Arg Ser Lys Leu Glu	Glu Ser Gln Pro
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Asp Lys Phe Leu Lys	Arg Ile Thr Asp His	Pro Val Leu Ser Phe Asn
165	170	175
Glu His Phe Asn Ile	Phe Leu Thr Ala Lys	Asp Leu Asn Ala Tyr Lys
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&lt;210&gt; 5913

&lt;211&gt; 2495

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5913

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 Gly Tyr Ala Val His Asp Asn Trp Ile Gly Cys Asn Val Ser Ser Tyr  
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&lt;210&gt; 5918

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 <213> Homo sapiens

<400> 5918

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Lys	Asn	Lys	Ala	Lys	Arg	Ser	Leu	Thr	Glu	Ser	Leu	Glu	Ser	Ile	Leu
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Asp	Leu	Asp	Ser	Ser	Leu	Ser	Ser	Thr	Leu	Ser	Asn	Thr	Ser	Lys	Glu
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Pro	Ser	Val	Cys	Glu	Lys	Glu	Ala	Leu	Pro	Ile	Ser	Glu	Ser	Ser	Phe
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Gln Pro Ala Arg Gly Ser Pro Gly Val Ser Gln Arg Lys Leu Met Arg
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Tyr His Ser Val Ser Thr Glu Thr Pro His Glu Arg Lys Asp Phe Glu
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Ser Lys Ala Asn His Leu Gly Asp Ser Gly Gly Thr Pro Val Lys Thr
465          470          475          480
Arg Arg His Ser Trp Arg Gln Gln Ile Phe Leu Arg Val Ala Thr Pro
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Gln Lys Ala Cys Asp Ser Ser Ser Arg Tyr Glu Asp Tyr Ser Glu Leu
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Gln Leu Gly Ala Gly Gln Leu Ser Leu Tyr Asn Ile Leu Lys Ala Tyr
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Ser Leu Leu Asp Gln Glu Val Gly Tyr Cys Gln Gly Leu Ser Phe Val
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Ala Gly Ile Leu Leu His Met Ser Glu Glu Glu Ala Phe Lys Met
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Leu Lys Phe Leu Met Phe Asp Met Gly Leu Arg Lys Gln Tyr Arg Pro
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Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu
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His Asp Tyr His Arg Asp Leu Tyr Asn His Leu Glu Glu His Glu Ile
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Gly Pro Ser Leu Tyr Ala Ala Pro Trp Phe Leu Thr Met Phe Ala Ser
785          790          795          800
Gln Phe Pro Leu Gly Phe Val Ala Arg Val Phe Asp Met Ile Phe Leu
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[illegible]

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<212> DNA
<213> Homo sapiens
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	50					55					60				
Leu	Gln	Glu	Arg	Ala	Glu	Arg	Val	Pro	Pro	Arg	Ser	Cys	Glu	Arg	His
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<210> 5921

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&lt;210&gt; 5922

&lt;211&gt; 1252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5922

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Lys	Ser	Val	Ile	Ile	Trp	Thr	Ser	Lys	Leu	Glu	Gly	Ile	Leu	Lys	Tyr
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Thr	His	Asn	Asp	Ala	Ile	Gln	Cys	Val	Ser	Tyr	Asn	Pro	Ile	Thr	His
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Ser Gly Gly Gly Tyr Leu Asn Ile Lys Ala Ser Thr Phe Pro Val His				
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Arg Gln Lys Leu Gln Gly Phe Val Val Gly Tyr Asn Gly Ser Lys Ile				
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Ala Pro Met Tyr Gln Tyr Leu Asp Arg Lys Leu Phe Lys Glu Ala Tyr				
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Gln Ile Ala Cys Leu Gly Val Thr Asp Thr Asp Trp Arg Glu Leu Ala				
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Met Glu Ala Leu Glu Gly Leu Asp Phe Glu Thr Ala Lys Lys Ala Phe				
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Ile Arg Val Gln Asp Leu Arg Tyr Leu Glu Leu Ile Ser Ser Ile Glu				
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Glu Arg Lys Lys Arg Gly Glu Thr Asn Asn Asp Leu Phe Leu Ala Asp				

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Val	Phe	Ser	Tyr	Gln	Gly	Lys	Phe	His	Glu	Ala	Ala	Lys	Leu	Tyr	Lys		
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Met	Phe	Glu	Tyr	Ala	Lys	Asp	Phe	Leu	Gly	Ser	Gly	Asp	Pro	Lys	Glu		
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Gln	Arg	Glu	Ala	Val	Gln	Val	Leu	Glu	Gln	Leu	Thr	Asn	Asn	Ala	Val		
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Ala	Glu	Ser	Arg	Phe	Asn	Asp	Ala	Ala	Tyr	Tyr	Trp	Met	Leu	Ser			
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Pro	Lys	Asp	Thr	Pro	Ser	Gly	Ile	Ser	Lys	Val	Lys	Ile	Leu	Phe	Thr		
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Ala	Tyr	Asp	Lys	Leu	Arg	Gly	Leu	Tyr	Ile	Pro	Ala	Arg	Phe	Gln	Lys		
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Ser	Glu	Glu	Leu	Val	Pro	Leu	Cys	Tyr	Arg	Cys	Ser	Thr	Asn	Asn	Pro		
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Leu	Leu	Asn	Asn	Leu	Gly	Asn	Val	Cys	Ile	Asn	Cys	Arg	Gln	Pro	Phe		
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Arg Arg Asp Val Leu Ile Lys Arg Trp Pro Pro Pro Leu Arg Trp Gln
      1140      1145      1150
Tyr Phe Arg Ser Leu Leu Pro Asp Ala Ser Ile Thr Met Cys Pro Ser
      1155      1160      1165
Cys Phe Gln Val Gly Gly His Pro Gly Ser Ser His Val Leu Leu Leu
      1170      1175      1180
Ala Thr Phe Pro Leu Pro Lys Cys Pro Ser Gly Arg Arg Gly Pro Trp
 1185      1190      1195      1200
Glu Gly Gly Ala His Pro Trp Leu Gln Val Gly Thr Glu Ala Cys Leu
      1205      1210      1215
Ser Ser Pro Leu Leu Ala Phe His Val His Leu Lys Trp Thr Ser Leu
      1220      1225      1230
Ala Pro Ala Leu Ser Thr Ser Ser Pro Asn Pro Gly Gly Pro Ala Ser
      1235      1240      1245
Val Met Cys Pro
      1250

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&lt;210&gt; 5923

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5923

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&lt;210&gt; 5924

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5924

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Lys Met	Lys Asp Ile Lys Thr Ile	Phe Ser Glu Phe Ile Thr Ile Glu			
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Met Leu Phe His Gly Lys Ala Leu Glu Val Tyr Thr Ala Ala Tyr Gln					
	50	55	60		
Asn Ile Gln Asn Ile Asp Glu Asp Glu Asp Leu Glu Val Phe Arg Asn					
65	70	75	80		
Ser Leu Tyr Ala Pro Asp Tyr Ser Ser Arg Leu Asp Ile Val Arg Ala					
	85	90	95		
Asn Ser Lys Ser Pro Leu Gln Arg Ser Leu Ser Ala Lys Cys Val Ser					
	100	105	110		
Gly Thr Gly Gln Val Ser Thr Cys Arg Leu Arg Lys Asp Gln Gln Ala					
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Leu Lys					
145					

&lt;210&gt; 5925

&lt;211&gt; 4538

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5925

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<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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			20					25					30		
Gln	Pro	Phe	Leu	Pro	Val	Phe	Thr	Met	Pro	Leu	Leu	Ser	Pro	Ser	Pro
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Ala	Pro	Pro	Pro	Ile	Ser	Pro	Val	Leu	Pro	Leu	Val	Pro	Pro	Pro	Ala
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Thr	Ala	Leu	Asn	Pro	Pro	Ala	Pro	Pro	Thr	Phe	His	Gln	Pro	Gln	Lys
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Phe	Ala	Gly	Val	Asn	Lys	Ala	Pro	Ser	Val	Ile	Thr	His	Thr	Ala	Ser
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Ala	Thr	Leu	Thr	His	Asp	Ala	Pro	Ala	Thr	Thr	Phe	Ser	Gln	Ser	Gln
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Leu	Gly	His	Gly	Thr	Ser	Ser	Pro	Pro	Ala	Pro	Val	Ser	Arg	Leu	Phe
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Pro	Ser	Thr	Ala	Gln	Asp	Pro	Leu	Gly	Lys	Gly	Glu	Gln	Val	Pro	Leu

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&lt;210&gt; 5927

&lt;211&gt; 1786

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5927

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&lt;210&gt; 5928

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5928

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Phe	Leu	Met	Glu	Asn	Arg	Val	Gln	Ser	Phe	Tyr	Gln	Gln	Glu	Leu	Glu			
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Ser	Thr	Met	Glu	His	Tyr	Tyr	Thr	Ala	Phe									
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&lt;210&gt; 5929

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5929

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606

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 35 40 45  
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 50 55 60  
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr  
 65 70 75 80  
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn  
 85 90 95  
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile  
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 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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 Glu Arg Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln  
 35 40 45  
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln  
 50 55 60  
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys  
 65 70 75 80  
 Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu  
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&lt;210&gt; 5933

&lt;211&gt; 1953

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5933

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&lt;210&gt; 5934

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5934

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		50				55				60					
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 <212> PRT  
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 35 40 45  
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 50 55 60  
 Glu Glu Gln Ile Arg Ile Ala Gln Arg Ile Gly Leu Ile Gln His Leu  
 65 70 75 80  
 Pro Lys Gly Val Tyr Asp Pro Gly Arg Asp Gly Ser Glu Lys Lys Ile  
 85 90 95  
 Arg Glu Cys Val Ile Cys Met Met Asp Phe Val Tyr Gly Asp Pro Ile  
 100 105 110  
 Arg Phe Leu Pro Cys Met His Ile Tyr His Leu Asp Cys Ile Asp Asp  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5938

&lt;211&gt; 406

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5938

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Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
 35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
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Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
          85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
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Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
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Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145           150           155           160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
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Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
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Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
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          260           265           270
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          275           280           285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
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305           310           315           320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
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Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
          340           345           350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
          355           360           365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
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405

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 <211> 795  
 <212> DNA  
 <213> Homo sapiens

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<210> 5940  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 5940  
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 35 40 45  
 Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe  
 50 55 60  
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5121

85

90

95

&lt;210&gt; 5941

&lt;211&gt; 2590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5941

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1380

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&lt;210&gt; 5942

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5942

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 20 25 30  
 Pro Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys

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      35              40              45
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<210> 5943  
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 <213> Homo sapiens

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<210> 5944  
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 <212> PRT  
 <213> Homo sapiens

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      20      25      30
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<210> 5945
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<212> DNA
<213> Homo sapiens
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240					
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869					

<210> 5946  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 5946  
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 35 40 45  
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln  
 50 55 60  
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln  
 65 70 75 80  
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu  
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<210> 5947  
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 <212> DNA  
 <213> Homo sapiens

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<210> 5948  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 5948  
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 Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg  
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<210> 5949  
 <211> 4706  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5950

&lt;211&gt; 397

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5950

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His	Ala	Met	Lys	Gly	Val	Ile	Arg	Val	Lys	Phe	Val	Asn	Asp	Leu	Gly
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Val	Asp	Glu	Ala	Gly	Ile	Asp	Gln	Asp	Gly	Val	Phe	Lys	Glu	Phe	Leu
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Glu	Glu	Ile	Ile	Lys	Arg	Val	Phe	Asp	Pro	Ala	Leu	Asn	Leu	Phe	Lys
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	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
	355	360
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		365
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Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser		380
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&lt;210&gt; 5951

&lt;211&gt; 1724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5951

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&lt;210&gt; 5952

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5952

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<212> DNA
<213> Homo sapiens
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 <211> 152  
 <212> PRT  
 <213> Homo sapiens

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 Thr Lys Pro Val Ile Leu Gly Leu  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5956

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5956

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<210> 5957  
<211> 855

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5957

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&lt;210&gt; 5958

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5958

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			20					25				30			
Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly
		35				40					45				
Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val
	50				55					60					
Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys	Pro	Glu
65				70				75					80		
Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu
			85					90					95		
Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Gly	Leu						

100

105

<210> 5959  
 <211> 830  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ctatatgatg acaatctctt ctgtcatttg gtggatgaag tactcttggt tgaaagggag  
 180  
 ctacacagtg ttcattggcta tcctggcact tttgctaatt gtagcatat tctatcagag  
 240  
 gaaacctgtt ttcaaagatg ggtgacgggg gagagaaaat ttgctcttca aaaaatggac  
 300  
 tcaatgcttt cctcagaagc tgccctgggta tcgcaatata aggatatcac tgacgtggat  
 360  
 gaaatgaaag ttccagattg tgcagaaact tttatgactc tactcttggt tataactgac  
 420  
 aggtataaaa atcttcccac agcttcccga aagcttcagt tcctggagtt acagaaggac  
 480  
 ttagtagatg atttttaggat acgattaaca caagtgatga aagaagagac tagagcttcc  
 540  
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 600  
 gattgggctg acaatgtttt ctttctacaa cttcaacagg ctgcactgga ggtgtttgca  
 660  
 gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgtc  
 720  
 tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtcaagta  
 780  
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 830

<210> 5960  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 5960  
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 20 25 30  
 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn  
 35 40 45  
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr  
 50 55 60  
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser  
 65 70 75 80  
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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&lt;400&gt; 5962

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Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
 1           5           10           15
Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
          20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
          35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
          50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
          85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
          100           105           110
Pro Ser

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&lt;210&gt; 5963

&lt;211&gt; 1288

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5963

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60
ttgaagataa gaaaggaaat gagagttggt gacaggcaaa taagggatat ccaaagagaa
120
gaagaaaaag tgaaacgatc tgtgaaagat gctgccaaga agggccagaa ggatgtctgc
180
atagttcttg ccaaggagat gatcagggtca aggaaggctg tgagcaagct gtatgcattc
240
aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
300
gctgggtccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
360
ccagagattc aggccaccat gagggagttg tccaaagaaa tgatgaagge tgggatcata
420
gaggagatgt tagaggacac ttttgaaagc atggacgatc aggaagaaat ggaggaagaa
480
gcagaaatgg aaattgacag aattctcttt gaaattacag caggggcctt gggcaaagca
540
cccagtaaag tgactgatgc ccttccagag ccagaacctc caggagcgat ggctgcctca
600
gaggatgagg aggaggagga agaggctctg gaggccatgc agtcccgggt ggccacactc
660
cgcagctagg ggctgcctac cccgctgggt gtgcacacac tcctctcaag agctgccatt
720
ttatgtgtct cttgcactac acctctgttg tgaggactac cattttggag aaggttctgt
780
ttgtctcttt tcattctctg cccaggtttt gggatcgcaa agggattggt cttataaaag
840
tggcataaat aaatgcatca tttttaggag tatagacaga tatatcttat tgtggggagg
900

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ggaaagaaat ccattctgctc atgaagcact tctgaaaata taggtgattg cctgaatgtc  
 960  
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 1020  
 agcacttggc cccattgtag attgccctgt gcagtaaact ttcaaggtgt cagctgcccc  
 1080  
 agattgcttc atttgctggg tgtggaaaga gttgctatgg ccaggcatat gggatttggg  
 1140  
 agctcagcag aagtgacttc tgctctgtgg ttgctgctcc ccggctttca cagacatggt  
 1200  
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 1260  
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 1288

<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

Met	Gly	Leu	Phe	Gly	Lys	Thr	Gln	Glu	Lys	Pro	Pro	Lys	Glu	Leu	Val
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Asn	Glu	Trp	Ser	Leu	Lys	Ile	Arg	Lys	Glu	Met	Arg	Val	Val	Asp	Arg
			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val	
		35				40					45				
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55				60					
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65				70					75					80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85					90					95		
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
		100						105					110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
	115					120					125				
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130					135					140				
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145				150					155					160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165					170					175		
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
		180						185					190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
	195					200					205				
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210					215					220				

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

&lt;400&gt; 5965

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120
agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggta ccgccaggct
180
ggaagcagtg ggccaggga ttctcagaac agctttctag ttcaagaggt gatggaagaa
240
gagtggaatg ctttgcagnn tcagtgggag aattgtccag aagacttggc tcagttggag
300
gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag
360
tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg
420
ctggctgagt gggaggcaaa cccactcatc tgtcctgtat gtacaaagta caacctgaga
480
atcacaagcg gtgtgggtgt gtgtcagtgt ggcctgtcca tcccatctca ttcttctgag
540
ttgacagagc agaagcttcg tgccgtgtta gagggtagta taaatgagca cagtgcacat
600
tgtccccaca cacctgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc
660
atgagctgtc tggcctgtga tacttgggct gtgatcctct agagccagct tggactcaca
720
tcattctatg gggttgaaga caactcattc cctctgagga gccttgatca tacaagcctt
780
ttatttataa cttattttgt attgaaactt ttaaacaata ctgaagaaaa aaaaactttt
840
ccgacatctg ttcttggctc tttgtgacgc aggttgaagg gggaggaata gaaaaagaca
900
aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
960
taatagattt gtacagaaaa aaatgataat aaatgagaac aaaaaacata t
1011

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&lt;210&gt; 5966

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5966

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Gly Asn Gly Ser Cys Gly Phe Val Ser Arg Glu Glu Glu Met Ala Glu
 1             5             10             15
Ser Leu Arg Ser Pro Arg Arg Ser Leu Tyr Lys Leu Val Gly Ser Pro
20             25             30
Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn
35             40             45
Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
50             55             60
Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
65             70             75             80
Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

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				85						90					95				
Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln				
			100					105					110						
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys				
		115					120					125							
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp				
	130					135					140								
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg				
145					150					155				160					
Ile	Thr	Ser	Gly	Val	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser				
			165					170					175						
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly				
		180						185				190							
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser				
	195					200					205								
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu				
	210				215					220									
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu											
225					230														

&lt;210&gt; 5967

&lt;211&gt; 1806

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5967

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 120  
 tgtgcttttg ttgctaggca gtcaacagca gggctactaa agcacttcta atttagacaa  
 180  
 atcttttcct ctattttaga aatggatttc aatgggtgttc agtttgtttg cagaaaccta  
 240  
 ctgaaagtga gcatgttttt gaacacatta acaccgaagt tctacgtggc cctaacaggc  
 300  
 acttcttcac taatatcagg gcttattttg atatttgaat ggtggtattt tgcgaaatac  
 360  
 ggaacttcat tcattgaaca agtctcagta agccacttgc gcccccttct gggagggggt  
 420  
 gacaacaact cttccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa  
 480  
 agtgtctcag aatgcaaagt atggcgaaat ccactaaatt tatttagggg tgctgaatac  
 540  
 aatcggtata cttgggtgac aggacgagag cctcttactt actatgacat gaatctctct  
 600  
 gcccaagacc accagacatt ctttacttgt gactcggacc atctgcgtcc cgcagatgca  
 660  
 ataatgcaga aagcctggag agagagaaac cccaagcta ggatttctgc agctcatgaa  
 720  
 gccttgagaa taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc  
 780  
 aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca  
 840



tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca  
 900  
 acaatatgct acacagctgc tttgctcaaa gcaagagctg tctctgacaa attctctcct  
 960  
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 1020  
 agagctgtgg aattcaatcc tcatgtgcca aaatacctac tagaaatgaa aagcttaatc  
 1080  
 ctacccccag aacatatacct gaagagagga gacagtgaag caatagcata tgcattcttt  
 1140  
 catcttgac actggaagag agtggaaggg gctttgaatc ttttgattg tacgtgggaa  
 1200  
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 1260  
 atctgtacag aaacagcaga ccgagagctg cttccatctt tccatgaagt ctcagtttac  
 1320  
 ccaaagaagg agcttccctt ctttattctc tttactgctg gattatgttc cttcacagcc  
 1380  
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 1440  
 agtgtttgcc tagagggagg ccttggggaa tggatgggga aagccaaggg cataaaagca  
 1500  
 gcgtgagaga aatgggggtg ccttacagaa atgggtacga gcctgcaaag atcattgctc  
 1560  
 accatttaat tttcatgac gtcaatggaa tcaaagcatt aagggtcaaa tgagaaagtg  
 1620  
 caggttgta ctgcatgcct tgccatctt cacaacaaat tcttagcagt ttccaaaaa  
 1680  
 tgcaggaggt ccaaaaggat ggaatgattt aggaaatcct agcaaataa aatgtgtggg  
 1740  
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 1800  
 ctttcc  
 1806

&lt;210&gt; 5968

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5968

Met	Asp	Phe	Asn	Gly	Val	Gln	Phe	Val	Cys	Arg	Asn	Leu	Leu	Lys	Val
1			5					10					15		
Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50			55					60				
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65					70				75					80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85				90						95	
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

[illegible]

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<210> 5969
<211> 429
<212> DNA
<213> Homo sapiens
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<400> 5969  
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120

attgagaaga tcctgagcga ggacccccgg tggcaagatg ccaacttcgt gctgggcagc  
 180  
 tacaagacgg agcagtgcc gaagccgcc cgctgtgcc gccagggcta tgcgtgcccc  
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 300  
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 420  
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 429

<210> 5970  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 5970  
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 Gly Val Leu Ala Ser Gln Ala Met Ile Glu Lys Ile Leu Ser Glu Asp  
 35 40 45  
 Pro Arg Trp Gln Asp Ala Asn Phe Val Leu Gly Ser Tyr Lys Thr Glu  
 50 55 60  
 Gln Cys Pro Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro  
 65 70 75 80  
 His Tyr His Asn Ser Arg Asp Arg Arg Arg Asn Pro Arg Arg Phe Gln  
 85 90 95  
 Tyr Arg Ser Thr Pro Cys Pro Ser Val Lys His Gly Asp Glu Trp Gly  
 100 105 110  
 Glu Pro Ser Arg Cys Asp Gly Gly Asp Gly Cys Gln Tyr Cys His Ser  
 115 120 125  
 Arg Thr Glu Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys  
 130 135 140

<210> 5971  
 <211> 565  
 <212> DNA  
 <213> Homo sapiens

<400> 5971  
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 tgtgaatagc acagtcttcc ctttcatgtg gcaactgaagt taaaatgcat agagctcttt  
 120  
 catgtccctt aggtcagcta agccacatc agtgtccaaa taggcaacat ccctatttta  
 180  
 tagatgggtca tccccatttt agagatagct cccttttata tccccatttt acaggtgaag  
 240  
 gaattgagggc acagaagggt aggtcacttc tgcaagatga ccagctgaac caaaatttca  
 300

gggcttcaaa caccaaagt gttcctttgt cttccgtttc ccacttgctt cccagaggct  
 360  
 cagcaagtag cctctggcca ctgagcatcc tcccgccac tttgctccct gcctcctgat  
 420  
 cccaggactg tggccgtgga tgccagagcg aggatgtgaa tcctgttggg ttctgaagcc  
 480  
 cacacctacc ctcagccttg aagctgcagc aatggctgct tccagatgag cacaccctcg  
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

Met	His	Arg	Ala	Leu	Ser	Cys	Pro	Leu	Gly	Gln	Leu	Ser	Pro	His	Gln
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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25					30		
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35				40						45			
Ala	Gln	Lys	Val	Arg	Ser	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn	
	50					55				60					
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65				70					75					80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
			85						90					95	
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
			100												

<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 120  
 aacgagcctt cgaatcatgg acgcgcgggc ccagctcctc ctccgagttc ctcacccggg  
 180  
 gccgtcactc acatccgggg ccctcactca catccggggac cctcatccgg ggctctcacc  
 240  
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 420  
 ccctccctc cggtgagtac ccggaagccg ttttggggtc gcagcggggg ggcagcttgt  
 480

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 540  
 ccgagagtgc gcggaggccc ggggtgcgagg agggcctgtt tctcttcagc cctggttcat  
 600  
 tcacctcgcg gaccgagggc ccgccgtcag gagccggcga ccgtgccctg gtgcgagctg  
 660  
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 780  
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 797

<210> 5974  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 5974  
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 35 40 45  
 Pro His Pro Gly Leu Ser Pro Thr Ser Gly Thr Leu Met Pro Gly Arg  
 50 55 60  
 Arg Arg Gly Gly Pro Ser Phe Gly Thr Pro Ala Leu Arg Arg Arg Lys  
 65 70 75 80  
 Cys His Arg Glu Ala Pro Ala Ser Gly Leu Ser Thr Ala Ala Arg Glu  
 85 90 95  
 Arg Leu Trp Trp Pro Arg Ala Arg Val Cys Arg  
 100 105

<210> 5975  
 <211> 2175  
 <212> DNA  
 <213> Homo sapiens

<400> 5975  
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 <211> 564  
 <212> PRT  
 <213> Homo sapiens

<400> 5976  
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 35 40 45  
 Pro Glu Val Ile Lys Asn Phe Ile Gln Tyr Phe His Lys Thr Val Ser  
 50 55 60  
 Asp Leu Ile Asp Gln Lys Val Tyr Glu Leu Gln Ala Ser Arg Val Ser  
 65 70 75 80  
 Ser Asp Val Ile Asp Gln Lys Val Tyr Glu Ile Gln Asp Ile Tyr Glu  
 85 90 95  
 Asn Ser Trp Thr Lys Leu Thr Glu Arg Phe Phe Lys Asn Thr Pro Trp  
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 Pro Glu Ala Glu Ala Ile Ala Pro Gln Val Gly Asn Asp Ala Val Phe  
 115 120 125  
 Leu Ile Leu Tyr Lys Glu Leu Tyr Tyr Arg His Ile Tyr Ala Lys Val  
 130 135 140  
 Ser Gly Gly Pro Ser Leu Glu Gln Arg Phe Glu Ser Tyr Tyr Asn Tyr  
 145 150 155 160  
 Cys Asn Leu Phe Asn Tyr Ile Leu Asn Ala Asp Gly Pro Ala Pro Leu  
 165 170 175  
 Glu Leu Pro Asn Gln Trp Leu Trp Asp Ile Ile Asp Glu Phe Ile Tyr  
 180 185 190  
 Gln Phe Gln Ser Phe Ser Gln Tyr Arg Cys Lys Thr Ala Lys Lys Ser  
 195 200 205  
 Glu Glu Glu Ile Asp Phe Leu Arg Ser Asn Pro Lys Ile Trp Asn Val  
 210 215 220  
 His Ser Val Leu Asn Val Leu His Ser Leu Val Asp Lys Ser Asn Ile  
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 245 250 255  
 Ala Gly Glu Tyr Gly Arg His Ser Leu Tyr Lys Met Leu Gly Tyr Phe  
 260 265 270  
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 Gln Ala Ile Lys Val Leu Glu Asn Ile Glu Leu Asn Lys Lys Ser Met  
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 Tyr Ser Arg Val Pro Glu Cys Gln Val Thr Thr Tyr Tyr Tyr Val Gly  
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 Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His  
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 485 490 495  
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 Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile  
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&lt;210&gt; 5977

&lt;211&gt; 2320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5977

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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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		20						25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
		35					40					45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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<210> 5980  
 <211> 169  
 <212> PRT  
 <213> Homo sapiens

<400> 5980  
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 Ser Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr Gln Asn  
 35 40 45  
 Thr His Leu Val Leu Ile Cys Tyr Asp Val Met Asn Pro Thr Ser Tyr  
 50 55 60  
 Asp Asn Val Leu Ile Lys Trp Phe Pro Glu Val Thr His Phe Cys Arg  
 65 70 75 80  
 Gly Ile Pro Met Val Leu Ile Gly Cys Lys Thr Asp Leu Arg Lys Asp  
 85 90 95  
 Lys Glu Gln Leu Arg Lys Leu Arg Ala Ala Gln Leu Glu Pro Ile Thr  
 100 105 110  
 Tyr Met Gln Gly Leu Ser Ala Cys Glu Gln Ile Arg Ala Ala Leu Tyr  
 115 120 125  
 Leu Glu Cys Ser Ala Lys Phe Arg Glu Asn Val Glu Asp Val Phe Arg  
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 145 150 155 160  
 Lys Lys Arg Arg Leu Cys Leu Leu Leu  
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<210> 5981  
 <211> 677  
 <212> DNA  
 <213> Homo sapiens

<400> 5981  
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&lt;210&gt; 5982

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5982

Met	Gln	Asn	Gly	Ser	Pro	Ala	Pro	Thr	Ser	Leu	Leu	Ser	Gly	Arg	Pro
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Arg	Ile	Pro	Lys	Ser	Asp	Asp	Gly	Thr	Arg	Thr	Gly	Arg	Asn	Asp	Ser
		20					25					30			
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
		35				40					45				
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
	50				55					60					
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
65				70					75				80		
Pro	Arg	Arg	Gly	Ser	Gly	Pro	Leu	Val	Arg	Ala	Gly	Arg	Arg	Gly	Trp
			85					90						95	

Gly Lys

&lt;210&gt; 5983

&lt;211&gt; 790

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5983

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 790

&lt;210&gt; 5984

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5984

Met	Leu	Thr	Leu	Gly	Pro	Phe	Arg	Asn	Ser	Asn	Leu	Thr	Glu	Leu	Gly
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Leu	Gln	Glu	Ile	Lys	Thr	Ile	Gly	Tyr	Thr	Ser	Pro	Arg	Ser	Arg	Thr
			20					25					30		
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
		35					40					45			
Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
	50					55					60				
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
65					70					75				80	
Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
			85						90					95	
Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
			100						105					110	
Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
		115					120					125			
Ser	Lys	Cys	Leu	Met	Gln	Asp	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr
	130					135					140				
Thr	Val	Phe	Cys	Thr	Ser	Glu	Asp	Gly	Leu	Val	Ser	Gly	Phe	Gly	Arg
145					150					155					160
Thr	Val	Asn	Asp	Asn	Leu	Ile	Asp	Gly	Asn	Cys	Thr	Pro	Gln	Asn	Pro
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180

185

<210> 5985  
 <211> 737  
 <212> DNA  
 <213> Homo sapiens

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 737

<210> 5986  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

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 Arg Glu Glu Ala Lys Ser His Pro Phe Ser Val Ile Tyr Arg Tyr Phe  
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 <212> DNA  
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<400> 5989



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&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5992

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu Met	Met Arg Asn Val
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370	375	380
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Asn Asp Phe Ala Lys Ile	Lys Lys Pro Tyr Lys Lys	Arg Met Thr Ala
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Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu Arg	Ala Val Met Gln
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Lys Arg Ile Ser Phe Arg	Ser Pro Glu Glu Arg Lys	Glu Gly Ala Glu
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Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe Leu	Phe Arg Lys Leu
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Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp Ile	Arg Asp Asp His
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Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala Ser	Arg Asp Met Lys

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&lt;210&gt; 6002

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6002

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<212> DNA
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&lt;210&gt; 6004

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6004

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&lt;210&gt; 6005

&lt;211&gt; 1735

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6005

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&lt;210&gt; 6006

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6006

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		20					25					30			
Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
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		85				90							95		
Ala	Lys	Gly	Glu	Lys	Gly	Ala	Ser	Gly	Glu	Arg	Gly	Ser	Ser	Gly	Leu
	100					105					110				
Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
	115				120						125				
Gly	Glu	Lys	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Asp	Gly	Phe	Pro	Gly
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Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
145			150					155							160
Arg	Gly	Val	Pro	Gly	Arg	Lys	Gly	Val	Lys	Gly	Gln	Lys	Gly	Glu	Pro
		165				170							175		
Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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&lt;210&gt; 6007

&lt;211&gt; 693

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 6007

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&lt;210&gt; 6008

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6008

Gln	Pro	Leu	Lys	Pro	Ser	Pro	Ser	Ser	Asp	Asn	Leu	Tyr	Ser	Ala	Phe
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			20					25					30		
Gly	Lys	Met	Val	Lys	Lys	Val	Cys	Pro	Cys	Asn	Gln	Leu	Cys	Arg	Thr
		35					40					45			
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		50				55					60				
Ala	Gln	Pro	Pro	Ala	Met	Thr	Ser	Ser	Arg	Lys	Gly	Thr	Phe	Thr	Asp
65					70				75						80
Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
			85					90						95	
Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
			100				105						110		
Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
		115				120					125				
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
		130				135					140				
Leu	Gly	His	Phe	Thr	Lys	Ser	Met	Cys	Pro	Pro	Gln	Gln	Tyr	Gly	Phe
145					150				155						160
Pro	Ala	Thr	Pro	Phe	Gly	Ala	Gln	Trp	Ser	Gly	Thr	Gly	Gly	Pro	Ala

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Pro	Gln	Pro	Leu	Gly	Gln	Phe	Gln	Pro	Val	Gly	Thr	Ala	Ser	Leu	Gln		
			180					185					190				
Asn	Phe	Asn	Ile	Ser	Asn	Leu	Gln	Lys	Ser	Ile	Ser	Asn	Pro	Pro	Gly		
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	210																

&lt;210&gt; 6009

&lt;211&gt; 1570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6009

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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ala Met Ala Cys Ala Leu Gly Tyr Asp Ile His Phe His Asp Lys Lys  
 50 55 60  
 Ile Leu Leu Leu Glu Ala Gly Pro Lys Lys Val Leu Glu Lys Leu Ser  
 65 70 75 80  
 Glu Thr Tyr Ser Asn Arg Val Ser Ser Ile Ser Pro Gly Ser Ala Thr  
 85 90 95  
 Leu Leu Ser Ser Phe Gly Ala Trp Asp His Ile Cys Asn Met Arg Tyr  
 100 105 110  
 Arg Ala Phe Arg Arg Met Gln Val Trp Asp Ala Cys Ser Glu Ala Leu  
 115 120 125  
 Ile Met Phe Asp Lys Asp Asn Leu Asp Asp Met Gly Tyr Ile Val Glu  
 130 135 140  
 Asn Asp Val Ile Met His Ala Leu Thr Lys Gln Leu Glu Ala Val Ser  
 145 150 155 160  
 Asp Arg Val Thr Val Leu Tyr Arg Ser Lys Ala Ile Arg Tyr Thr Trp  
 165 170 175  
 Pro Cys Pro Phe Pro Met Ala Asp Ser Ser Pro Trp Val His Ile Thr  
 180 185 190  
 Leu Gly Asp Gly Ser Thr Phe Gln Thr Lys Leu Leu Ile Gly Ala Asp  
 195 200 205  
 Gly His Asn Ser Gly Val Arg Gln Ala Val Gly Ile Gln Asn Val Ser  
 210 215 220  
 Trp Asn Tyr Asp Gln Ser Ala Val Val Ala Thr Leu His Leu Ser Glu  
 225 230 235 240  
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 245 250 255  
 Ile Ala Leu Leu Pro Leu Ser Asp Thr Leu Ser Ser Leu Val Trp Ser

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		275					280					285					
Phe	Val	Asp	Ala	Val	Asn	Ser	Ala	Phe	Trp	Ser	Asp	Ala	Asp	His	Thr		
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Asp	Phe	Ile	Asp	Thr	Ala	Gly	Ala	Met	Leu	Gln	Tyr	Pro	Val	Ser	Leu		
305					310					315					320		
Leu	Lys	Pro	Thr	Lys	Val	Ser	Ala	Arg	Gln	Leu	Pro	Pro	Ser	Val	Pro		
				325					330					335			
Trp	Val	Asp	Ala	Lys	Ser	Arg	Val	Leu	Phe	Pro	Leu	Gly	Leu	Gly	His		
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Ala	Ala	Glu	Tyr	Val	Arg	Pro	Arg	Val	Ala	Leu	Ile	Gly	Asp	Ala	Ala		
	355				360						365						
His	Arg	Val	His	Pro	Leu	Ala	Gly	Gln	Gly	Val	Asn	Met	Gly	Phe	Gly		
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Asp	Ile	Ser	Ser	Leu	Ala	His	His	Leu	Ser	Thr	Ala	Ala	Phe	Asn	Gly		
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Lys	Asp	Leu	Gly	Ser	Val	Ser	His	Leu	Thr	Gly	Tyr	Glu	Thr	Glu	Arg		
			405					410						415			
Gln	Arg	His	Asn	Thr	Ala	Leu	Leu	Ala	Ala	Thr	Asp	Leu	Leu	Lys	Arg		
		420			425							430					
Leu	Tyr	Ser	Thr	Ser	Ala	Ser	Pro	Leu	Val	Leu	Leu	Arg	Thr	Trp	Gly		
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&lt;210&gt; 6011

&lt;211&gt; 1331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6011

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&lt;210&gt; 6012

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6012

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			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
		35					40					45			
Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
	50					55				60					
Glu	His	Leu	Lys	His	Gln	Thr	Val	Tyr	Arg	Leu	Leu	Lys	Cys	Ala	Pro
65				70					75					80	
Arg	Gly	Lys	Asn	Gly	Phe	Thr	Pro	Leu	His	Met	Ala	Val	Asp	Lys	Asp
			85					90					95		
Thr	Thr	Asn	Val	Gly	Arg	Tyr	Pro	Val	Gly	Arg	Phe	Pro	Ser	Leu	His
		100						105					110		
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
		115					120					125			
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
	130					135				140					
Ala	Ile	Met	Asn	Ala	Leu	Ile	Glu	Ala	Gly	Ala	His	Met	Asp	Ala	Thr
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Asn	Ala	Phe	Lys	Lys	Thr	Ala	Tyr	Glu	Leu	Leu	Asp	Glu	Lys	Leu	Leu

				165				170					175		
Ala	Arg	Gly	Thr	Met	Gln	Pro	Phe	Asn	Tyr	Val	Thr	Leu	Gln	Cys	Leu
			180					185					190		
Ala	Ala	Arg	Ala	Leu	Asp	Lys	Asn	Lys	Ile	Pro	Tyr	Lys	Gly	Phe	Ile
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&lt;210&gt; 6014

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6014

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Ala	Tyr	Thr	Asp	Ala	Ala	Ser	Leu	Glu	Val	His	Leu	Ser	Thr	His	Thr
			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
		35				40					45				
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
		50				55					60				
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
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Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
			85					90					95		
Gln	Ala	Gln	Ala	Gln	Ala	Ser	Gln	Ala	Ser	Gln	Gln	Gln	Gln	Gln	Gln

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      130      135      140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
145      150      155      160
His His Lys Asp Ile Cys Leu Thr Val Thr Thr Ser Thr Ile Gln Val
      165      170      175
Glu His Leu Ala Ser Ser
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&lt;210&gt; 6015

&lt;211&gt; 612

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6015

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&lt;210&gt; 6016

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6016

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Arg Cys Lys Leu Asn Asn Asn Ser Trp Ser Gly Leu Thr Cys Pro Thr
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&lt;211&gt; 537

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6018

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Val 465	Lys	Ala	Phe	Val	Val	Leu	Ala	Ser	Gln	Phe	Leu	Ser	His	Asp	Pro 430
Glu	Gln	Leu	Thr	Lys	Glu	Leu	Gln	Gln	His	Val	Lys	Ser	Val	Thr	Ala 435
Pro	Tyr	Lys	Tyr	Pro	Arg	Lys	Ile	Glu	Phe	Val	Leu	Asn	Leu	Pro	Lys 440
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<211> 3002

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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225          230          235          240
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&lt;211&gt; 1014

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 6024

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6024

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&lt;210&gt; 6026

&lt;211&gt; 496

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6026

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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His	Ser	Ala	Ala	Ala	Gly	Arg	Asp	Ser	Thr	Lys	Ala	Phe	Ser	Ala	Phe
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Tyr	His	Tyr	Gly	Phe	Cys	Asp	Val	Ile	Pro	Pro	Asn	Cys	Ile	Gln	Leu
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Gln	Ala	Ile	Ala	His	Ile	His	Asn	Lys	Gly	Ser	Thr	Pro	Ser	Met	Ser
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 <212> DNA  
 <213> Homo sapiens

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 35 40 45  
 Ala Trp Pro Arg Ser Gln Ser His Asn Ala His His Cys Pro Thr Met  
 50 55 60  
 Pro Phe Arg Met Glu Pro Leu Ile His Trp Ala His Ser His Gly Gln  
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<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
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Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
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Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln
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Val	Tyr	Val	Thr	Phe	Ala	Val	Ser	Phe	Tyr	Leu	Val	Ala	Gly	Ala	Gly
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 <212> DNA  
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 Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala  
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 Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala  
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 Gly Gln Val Phe Ser Trp Gly Gly Arg His Gly Gln Leu Gly His  
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 Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln  
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 Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys  
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 Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val  
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 Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg  
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 Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln  
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 Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys  
 225 230 235 240  
 Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu  
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 Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys  
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&lt;210&gt; 6041

&lt;211&gt; 291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6041

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<210> 6044  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 6044

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Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu
      20           25           30
Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
      35           40           45
Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
      50           55           60
Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
65           70           75           80
Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro'Gly Arg Met
      85           90           95
Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
      100          105          110
Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
      115          120          125
Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
      130          135          140
Thr Leu Cys Leu Asp Ile Ser Tyr
145           150

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&lt;210&gt; 6045

&lt;211&gt; 1916

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6045

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780

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 1860  
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 1916

&lt;210&gt; 6046

&lt;211&gt; 457

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6046

Thr	Arg	Val	Glu	Thr	His	Phe	Gln	Pro	Arg	Gly	Ala	Gly	Glu	Gly	Gly
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Pro	Tyr	Gly	Cys	Lys	Asp	Ala	Leu	Arg	Gln	Gln	Leu	Arg	Ser	Ala	Arg
			20					25					30		
Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
			35				40					45			
Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
			50			55					60				
Leu	Leu	Asp	Gln	Ala	Leu	Leu	Ser	Gln	Phe	Leu	Asp	Met	Cys	Met	Asp

65	Leu	Lys	Val	His	Pro	Glu	Gln	Glu	Lys	Leu	Met	Thr	Val	Arg	Thr	Ile
					85					90					95	
	Thr	Gly	Asn	Ile	Tyr	Tyr	Ala	Arg	Ser	Gly	Thr	Lys	Ile	Ile	Gly	Lys
				100						105					110	
	Val	His	Glu	Lys	Phe	Thr	Leu	Ile	Asp	Gly	Ile	Arg	Val	Ala	Thr	Gly
				115						120					125	
	Ser	Tyr	Ser	Phe	Thr	Trp	Thr	Asp	Gly	Lys	Leu	Asn	Ser	Ser	Asn	Leu
								135					140			
	Val	Ile	Leu	Ser	Gly	Gln	Val	Val	Glu	His	Phe	Asp	Leu	Glu	Phe	Arg
						150						155				160
	Ile	Leu	Tyr	Ala	Gln	Ser	Lys	Pro	Ile	Ser	Pro	Lys	Leu	Leu	Ser	His
					165						170					175
	Phe	Gln	Ser	Ser	Asn	Lys	Phe	Asp	His	Leu	Thr	Asn	Arg	Lys	Pro	Gln
					180					185					190	
	Ser	Lys	Glu	Leu	Thr	Leu	Gly	Asn	Leu	Leu	Arg	Met	Arg	Leu	Ala	Arg
								200						205		
	Leu	Ser	Ser	Thr	Pro	Arg	Lys	Ala	Asp	Leu	Asp	Pro	Glu	Met	Pro	Ala
								215					220			
	Glu	Gly	Lys	Ala	Glu	Arg	Lys	Pro	His	Asp	Cys	Glu	Ser	Ser	Thr	Val
						230						235				240
	Ser	Glu	Glu	Asp	Tyr	Phe	Ser	Ser	His	Arg	Asp	Glu	Leu	Gln	Ser	Arg
						245						250				255
	Lys	Ala	Ile	Asp	Ala	Ala	Thr	Gln	Thr	Glu	Pro	Gly	Glu	Glu	Met	Pro
					260					265					270	
	Gly	Leu	Ser	Val	Ser	Glu	Val	Gly	Thr	Gln	Thr	Ser	Ile	Thr	Thr	Ala
								280					285			
	Cys	Ala	Gly	Thr	Gln	Thr	Ala	Val	Ile	Thr	Arg	Ile	Ala	Ser	Ser	Gln
								295					300			
	Thr	Thr	Ile	Trp	Ser	Arg	Ser	Thr	Thr	Thr	Gln	Thr	Asp	Met	Asp	Glu
								310					315			320
	Asn	Ile	Leu	Phe	Pro	Arg	Gly	Thr	Gln	Ser	Thr	Glu	Gly	Ser	Pro	Val
						325					330					335
	Ser	Lys	Met	Ser	Val	Ser	Arg	Ser	Ser	Ser	Leu	Lys	Ser	Ser	Ser	Ser
										345					350	
	Val	Ser	Ser	Gln	Gly	Ser	Val	Ala	Ser	Ser	Thr	Gly	Ser	Pro	Ala	Ser
								360					365			
	Ile	Arg	Thr	Thr	Asp	Phe	His	Asn	Pro	Gly	Tyr	Pro	Lys	Tyr	Leu	Gly
								375					380			
	Thr	Pro	His	Leu	Glu	Leu	Tyr	Leu	Ser	Asp	Ser	Leu	Arg	Asn	Leu	Asn
								390				395				400
	Lys	Glu	Arg	Gln	Phe	His	Phe	Ala	Gly	Ile	Arg	Ser	Arg	Leu	Asn	His
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<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

&lt;400&gt; 6047

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 240  
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 480  
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 773

&lt;210&gt; 6048

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6048

Met	Val	Lys	Arg	Val	Ser	Glu	Met	Ser	Asp	Lys	Lys	Gln	Leu	Arg	Ser
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Arg	Ser	Cys	Arg	Pro	Pro	Gly	Ser	Ser	Ser	Gly	Ser	Pro	Ser	Ser	Thr
			20					25					30		
Gly	Thr	Thr	Leu	Glu	Lys	Ser	Cys	Leu	His	His	Cys	Ser	Gly	Gly	Gly
		35					40					45			
His	Leu	Pro	Ser	Ala	Cys	Leu	Gly	Ala	Arg	Arg	Ser	Ser	Ser	Leu	Leu
	50					55					60				
Gly	Tyr	Gly	Ser	Cys	Arg	Asp	Thr	Gln	Ser	Trp	Thr	Pro	Asp	Pro	Leu
65					70				75					80	
Pro	His	Pro	Pro	Ser	Leu	Ser	Pro	Gln	Ser	Leu	Leu	Tyr	Ser	Gln	Ala
				85					90					95	
Met	Arg	Ser	Pro	Ile	Ser	His	Gln	Glu	Leu	Thr	Arg	Pro	Leu	Gly	Lys
			100					105					110		
Glu	Ala	Ala	Arg	Arg	Arg	Cys	Gly	His	Thr	Val	Ala	Leu	Ser	Ala	Arg
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Asp															

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 <211> 479  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
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 240  
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<210> 6050  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 6050  
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 35 40 45  
 Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Ser Thr  
 50 55 60  
 Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe  
 65 70 75 80  
 Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys  
 85 90 95  
 Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys  
 100 105 110  
 Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala  
 115 120 125  
 Ala Thr Ser Gln Glu Gln Gln Leu Lys Asn Lys Ser Ile Leu Ile Ser  
 130 135 140  
 Ser Val Gly Ser Val His His Ala Asp Gly Leu Ala Glu Ser Ser  
 145 150 155

<210> 6051  
 <211> 2404  
 <212> DNA  
 <213> Homo sapiens

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240  
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300  
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360  
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420  
gagagccagc acagtgaatg gtttgcagtg tatgtggaac ttaatcagca aattgcagca  
480  
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 2280  
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 2404

<210> 6052  
 <211> 518  
 <212> PRT  
 <213> Homo sapiens

<400> 6052  
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 Thr Gly His Glu Leu Leu Ser Glu Leu Gln Gln Arg Arg Phe Asn Gly  
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 Ser Asp Gly Gly Val Ser Trp Ser Pro Met Asp Asp Glu Leu Leu Ala  
 50 55 60  
 Gln Pro Gln Val Met Lys Leu Leu Asp Ser Leu Arg Glu Gln Tyr Thr  
 65 70 75 80  
 Arg Tyr Gln Glu Val Cys Arg Gln Arg Ser Lys Arg Thr Gln Leu Glu  
 85 90 95  
 Glu Ile Gln Gln Lys Val Met Gln Val Val Asn Trp Leu Glu Gly Pro  
 100 105 110  
 Gly Ser Glu Gln Leu Arg Ala Gln Trp Gly Ile Gly Asp Ser Ile Arg  
 115 120 125  
 Ala Ser Gln Ala Leu Gln Gln Lys His Glu Glu Ile Glu Ser Gln His



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Ser Glu Trp Phe Ala Val Tyr Val Glu Leu Asn Gln Gln Ile Ala Ala
145              150              155              160
Leu Leu Asn Ala Gly Asp Glu Glu Asp Leu Val Glu Leu Lys Ser Leu
      165              170              175
Gln Gln Gln Leu Ser Asp Val Cys Tyr Arg Gln Ala Ser Gln Leu Glu
      180              185              190
Phe Arg Gln Asn Leu Leu Gln Ala Ala Leu Glu Phe His Gly Val Ala
      195              200              205
Gln Asp Leu Ser Gln Gln Leu Asp Gly Leu Leu Gly Met Leu Cys Val
      210              215              220
Asp Val Ala Pro Ala Asp Gly Ala Ser Ile Gln Gln Thr Leu Lys Leu
225              230              235              240
Leu Glu Glu Lys Leu Lys Ser Val Asp Val Gly Leu Gln Gly Leu Arg
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Glu Lys Gly Gln Gly Leu Leu Asp Gln Ile Ser Asn Gln Ala Ser Xaa
      260              265              270
Gly Pro Met Glu Arg Met Xaa Thr Ile Glu Asn Lys Glu Asn Val Asp
      275              280              285
His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys
      290              295              300
Glu Asp Met Val Asp Val Arg Arg Leu Lys Met Leu Gln Met Val Gln
305              310              315              320
Leu Phe Lys Cys Glu Glu Asp Ala Ala Lys Ala Val Glu Trp Leu Ser
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Glu Leu Leu Asp Ala Leu Leu Lys Thr His Ile Arg Leu Gly Asp Asp
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Ala Gln Glu Thr Lys Val Leu Leu Glu Lys His Arg Lys Phe Val Asp
      355              360              365
Val Ala Gln Ser Thr Tyr Asp Tyr Gly Arg Gln Leu Leu Gln Ala Thr
      370              375              380
Val Val Leu Cys Gln Ser Leu Arg Cys Thr Ser Arg Ser Ser Gly Asp
385              390              395              400
Thr Leu Pro Arg Leu Asn Arg Val Trp Lys Gln Phe Thr Ile Ala Ser
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Glu Glu Arg Val His Arg Leu Glu Met Ala Ile Ala Phe His Ser Asn
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Ala Glu Lys Ile Leu Gln Asp Cys Pro Glu Glu Pro Glu Ala Ile Asn
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Asp Glu Glu Gln Phe Asp Glu Ile Glu Ala Val Gly Lys Ser Leu Leu
      450              455              460
Asp Arg Leu Thr Val Pro Val Val Tyr Pro Asp Gly Thr Glu Gln Tyr
465              470              475              480
Phe Gly Ser Pro Ser Asp Met Ala Ser Thr Ala Glu Asn Ile Arg Asp
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Arg Met Lys Leu Val Asn Leu Lys Arg Gln Gln Leu Arg His Pro Glu
      500              505              510
Met Val Thr Thr Glu Ser
      515

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&lt;210&gt; 6053

&lt;211&gt; 3257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6053

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<211> 382

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<213> Homo sapiens

<400> 6054

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&lt;211&gt; 285

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&lt;213&gt; Homo sapiens

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<400> 6060

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			20					25					30		
Ile	Ser	Tyr	Thr	Ile	Thr	Ile	Phe	Gly	Asn	Val	Ser	Ile	Met	Met	Val
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Cys	Ile	Leu	Asp	Pro	Lys	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Thr
	50					55					60				
Asn	Leu	Ser	Ile	Leu	Asp	Leu	Cys	Tyr	Thr	Thr	Thr	Thr	Val	Pro	His
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Met	Leu	Val	Asn	Ile	Gly	Cys	Asn	Lys	Lys	Thr	Ile	Ser	Tyr	Ala	Gly
			85					90						95	
Cys	Val	Ala	His	Leu	Ile	Ile	Phe	Leu	Ala	Leu	Gly	Ala	Thr	Glu	Cys
		100					105						110		
Leu	Leu	Leu	Ala	Val	Met	Ser	Phe	Asp	Arg	Tyr	Val	Ala	Val	Cys	Arg
		115					120					125			
Pro	Leu	His	Tyr	Val	Val	Ile	Met	Asn	Tyr	Trp	Phe	Cys	Leu	Arg	Met
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Phe	Phe	Cys	Glu	Val	Pro	Ala	Leu	Leu	Lys	Leu	Ser	Cys	Ala	Asp	Thr
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Lys	Pro	Ile	Glu	Ala	Glu	Leu	Phe	Phe	Phe	Ser	Val	Leu	Ile	Leu	Leu
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Ile	Pro	Val	Thr	Leu	Ile	Leu	Ile	Ser	Tyr	Gly	Phe	Ile	Ala	Gln	Ala
	210				215						220				
Val	Leu	Lys	Ile	Arg	Ser	Ala	Glu	Gly	Arg	Gln	Lys	Ala	Phe	Gly	Thr
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Cys	Gly	Ser	His	Met	Ile	Val	Val	Ser	Leu	Phe	Tyr	Gly	Thr	Ala	Ile
			245						250					255	
Tyr	Met	Tyr	Leu	Gln	Pro	Pro	Ser	Ser	Thr	Ser	Lys	Asp	Trp	Gly	Lys

	260		265		270										
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	275						280					285			
Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Asp	Met	Lys	Glu	Ala	Phe	Lys	Arg	Leu
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305					310										

&lt;210&gt; 6061

&lt;211&gt; 1582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6061

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<210> 6062

<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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			20					25					30		
Arg	Pro	Arg	Asp	Leu	Leu	Gln	Arg	Tyr	Asp	Ser	Lys	Pro	Ile	Val	Asp
		35					40					45			
Leu	Ile	Gly	Ala	Met	Glu	Thr	Gln	Ser	Glu	Pro	Ser	Glu	Leu	Glu	Leu
	50					55				60					
Asp	Asp	Val	Val	Ile	Thr	Asn	Pro	His	Ile	Glu	Ala	Ile	Leu	Glu	Asn
65					70					75					80
Glu	Asp	Trp	Ile	Glu	Asp	Ala	Ser	Gly	Leu	Met	Ser	His	Cys	Ile	Ala
			85						90					95	
Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
			100					105					110		
Met	Gly	Ser	Gly	Ala	Lys	Met	Lys	Thr	Ser	Ala	Ser	Val	Ser	Asp	Ile
		115					120					125			
Ile	Val	Val	Ala	Lys	Arg	Ile	Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys
	130					135					140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
145					150					155					160
Ala	Leu	Leu	Leu	Ser	Val	Ser	His	Leu	Val	Leu	Val	Thr	Arg	Asn	Ala
				165					170					175	
Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
			180				185						190		
Ala	Glu	Glu	His	Leu	Glu	Val	Leu	Arg	Glu	Ala	Ala	Leu	Ala	Ser	Glu
	195					200					205				
Pro	Asp	Lys	Gly	Leu	Pro	Gly	Pro	Glu	Gly	Phe	Leu	Gln	Glu	Gln	Ser
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Ala	Ile														
225															

<210> 6063

<211> 2286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6063

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&lt;210&gt; 6064

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6064

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Phe	Leu	His	Pro	Asp	Leu	Gly	Val	Gly	Gly	Ala	Glu	Arg	Leu	Val	Leu
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Asp	Ala	Ala	Leu	Ala	Leu	Gln	Ala	Arg	Gly	Cys	Ser	Val	Lys	Ile	Trp
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Thr	Ala	His	Tyr	Asp	Pro	Gly	His	Cys	Phe	Ala	Glu	Ser	Arg	Glu	Leu
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Pro	Val	Arg	Cys	Ala	Gly	Asp	Trp	Leu	Pro	Arg	Gly	Leu	Gly	Trp	Gly
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Leu	Tyr	Val	Leu	Phe	Leu	Ala	Asp	Glu	Glu	Phe	Asp	Val	Val	Val	Cys
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Asp	Gln	Val	Ser	Ala	Cys	Ile	Pro	Val	Phe	Arg	Leu	Ala	Arg	Arg	Arg
		130				135					140				
Lys	Lys	Ile	Leu	Phe	Tyr	Cys	His	Phe	Pro	Asp	Leu	Leu	Leu	Thr	Lys



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Glu Glu Tyr Thr Thr Gly Met Ala Asp Cys Ile Leu Val Asn Ser Gln						
	180		185		190	
Phe Thr Ala Ala Val Phe Lys Glu Thr Phe Lys Ser Leu Ser His Ile						
	195		200		205	
Asp Pro Asp Val Leu Tyr Pro Ser Leu Asn Val Thr Ser Phe Asp Ser						
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Val Val Pro Glu Xaa Ser Trp Met Thr						
225		230				

&lt;210&gt; 6065

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6065

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1080

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 2084

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 <212> PRT  
 <213> Homo sapiens

<400> 6066  
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 Ala Ile Asp Lys Pro Thr Tyr Ala Thr Lys Trp Pro Ile Arg His Gly  
 35 40 45  
 Ile Ile Glu Asp Trp Asp Leu Met Glu Arg Phe Met Glu Gln Val Val  
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 Phe Lys Tyr Leu Arg Ala Glu Pro Glu Asp His Tyr Phe Leu Met Gly  
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<210> 6067  
 <211> 406

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6067

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406

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&lt;210&gt; 6068

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6068

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Ser Leu Phe Leu Ser Gly Asn Val Ser Ser Arg Arg Met Arg Thr Ala
          35          40          45
Ser Arg Ser Ser Glu Pro Pro Ala Cys Pro Arg His Trp Pro Cys Pro
          50          55          60
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
65          70          75          80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
          85          90          95
Arg Gly Ala Val Ser Ser Gly Arg Leu His Arg Arg Gly Thr Gly Ala
          100          105          110
Met Trp Trp Glu Gly
          115

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&lt;210&gt; 6069

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6069

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ctggagtact gtatcatggt cattggggtc cccaacgtgg gcaagtcctc cctcatcaac
180

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<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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		20						25					30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35					40					45			
Gly	Val	Pro	Asn	Val	Gly	Lys	Ser	Ser	Leu	Ile	Asn	Ser	Leu	Arg	Arg
	50					55					60				
Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
65					70				75					80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
			85					90						95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
		100					105					110			
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<212> DNA

<213> Homo sapiens

<400> 6071

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<213> Homo sapiens

<400> 6076

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5260

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 1980  
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 2093

&lt;210&gt; 6078

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6078

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Leu	Arg	Ala	Val	Ser	Gly	Gly	Ser	Gly	Asn	Arg	Ile	Lys	Ala	Arg	Gly
		20						25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
		35					40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
	50					55					60				
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
65				70						75				80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85						90					95	
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
		100						105					110		
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
		115					120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
	130					135					140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145					150					155				160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165						170					175	
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

	180		185		190										
Gly	Glu	Gln	Glu	Asp	Glu	Lys	Pro	Leu	Cys	Lys	Asn	Thr	Gly	Leu	Gln
	195		200		205										
Cys	Pro	Glu	Tyr	Gln											
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&lt;210&gt; 6079

&lt;211&gt; 651

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6079

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300
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360
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420
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651

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&lt;210&gt; 6080

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6080

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Val	Gly	Ala	Trp	Leu	Lys	Leu	Gly	Asn	Gly	Gln	Ala	Thr	Ser	Met	Val
			20					25					30		
Gln	Leu	Gln	Gly	Gly	Arg	Phe	Leu	Met	Gly	Thr	Asn	Ser	Pro	Asp	Ser
		35					40					45			
Arg	Asp	Gly	Glu	Gly	Pro	Val	Arg	Glu	Ala	Thr	Val	Lys	Pro	Phe	Ala
	50					55					60				
Ile	Asp	Ile	Phe	Pro	Val	Thr	Asn	Lys	Asp	Phe	Arg	Asp	Phe	Val	Arg
65					70					75				80	
Glu	Lys	Lys	Tyr	Arg	Thr	Glu	Ala	Glu	Met	Phe	Gly	Trp	Ser	Phe	Val
				85				90						95	
Phe	Glu	Asp	Phe	Val	Ser	Asp	Glu	Leu	Arg	Asn	Lys	Ala	Thr	Gln	Pro



```

65          70          75          80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
          85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
          145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
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Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
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<210> 6083  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

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120
aatgaaaggc taacagctttt acaagagaag ctgatcgtcg aagggcattct aaccaaagcg
180
gtagaagaaa caaagctttc aaaagaaaat cagacaagag caaaagaatc tgatttttca
240
gatactctga gtccaagcaa ggaaaaaagc agtgacgaca ctacagacgc ccaaatggat
300
gagcaagacc taaatgagcc tcttgccaaa gtgtcccttt taaaagatga cttgcagg
358

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<210> 6084  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

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<400> 6084
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Ala Asp Asn Asp Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Glu Lys
20          25          30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
35          40          45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
50          55          60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
			85				90							95	
Lys	Asp	Asp	Leu	Gln											
			100												

&lt;210&gt; 6085

&lt;211&gt; 2307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6085

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120
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240
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480
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1140
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1260

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 2280  
 aaaaaaaaaa aaaaaaaaaa aaaaaaa  
 2307

&lt;210&gt; 6086

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6086

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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20					25					30		
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35				40						45			
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
	50				55					60					
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
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Asp	Ser	Thr	Val												

<210> 6087  
<211> 1506  
<212> DNA  
<213> Homo sapiens

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180  
gaggagaagg ggggcaaagt ctatcaggtg tttgaaagtg tggctaagaa gtatgatgtg  
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1380

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<210> 6088

<211> 326

<212> PRT

<213> Homo sapiens

<400> 6088

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Ser	Arg	Ala	Met	Arg	Gly	Cys	Gln	Leu	Leu	Gly	Leu	Arg	Ser	Ser	Trp
			20					25					30		
Pro	Gly	Asp	Leu	Leu	Ser	Ala	Arg	Leu	Leu	Ser	Gln	Glu	Lys	Arg	Ala
		35					40					45			
Ala	Glu	Thr	His	Phe	Gly	Phe	Glu	Thr	Val	Ser	Glu	Glu	Glu	Lys	Gly
	50					55					60				
Gly	Lys	Val	Tyr	Gln	Val	Phe	Glu	Ser	Val	Ala	Lys	Lys	Tyr	Asp	Val
65					70					75				80	
Met	Asn	Asp	Met	Met	Ser	Leu	Gly	Ile	His	Arg	Val	Trp	Lys	Asp	Leu
				85					90					95	
Leu	Leu	Trp	Lys	Met	His	Pro	Leu	Pro	Gly	Thr	Gln	Leu	Leu	Asp	Met
			100					105					110		
Ala	Gly	Gly	Thr	Gly	Asp	Ile	Ala	Phe	Arg	Phe	Leu	Asn	Tyr	Val	Gln
		115					120					125			
Ser	Gln	His	Gln	Arg	Lys	Gln	Lys	Arg	Gln	Leu	Arg	Ala	Gln	Gln	Asn
	130					135					140				
Leu	Ser	Trp	Glu	Glu	Ile	Ala	Lys	Glu	Tyr	Gln	Asn	Glu	Glu	Asp	Ser
145					150					155				160	
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			165						170					175	
Lys	Val	Gly	Lys	Gln	Lys	Ala	Leu	Ala	Gln	Gly	Tyr	Arg	Ala	Gly	Leu
		180					185						190		
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	195						200					205			
Phe	Asp	Ile	Tyr	Thr	Ile	Ala	Phe	Gly	Ile	Arg	Asn	Val	Thr	His	Ile
	210					215					220				
Asp	Gln	Ala	Leu	Gln	Glu	Ala	His	Arg	Val	Leu	Lys	Pro	Gly	Gly	Arg
225				230						235				240	
Phe	Leu	Cys	Leu	Glu	Phe	Ser	Gln	Val	Asn	Asn	Pro	Leu	Ile	Ser	Arg
		245							250					255	
Leu	Tyr	Asp	Leu	Tyr	Ser	Phe	Gln	Val	Ile	Pro	Val	Leu	Gly	Glu	Val
	260						265						270		
Ile	Ala	Gly	Asp	Trp	Lys	Ser	Tyr	Gln	Tyr	Leu	Val	Glu	Ser	Ile	Arg
	275					280						285			
Arg	Phe	Pro	Ser	Gln	Glu	Glu	Phe	Lys	Asp	Met	Ile	Glu	Asp	Ala	Gly
	290				295						300				
Phe	His	Lys	Val	Thr	Tyr	Glu	Ser	Leu	Thr	Ser	Gly	Ile	Val	Ala	Ile
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His	Ser	Gly	Phe	Lys	Leu										

325

<210> 6089  
<211> 4211  
<212> DNA  
<213> Homo sapiens

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1380

5269

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&lt;210&gt; 6090

&lt;211&gt; 839

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6090

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Glu	Thr	Ser	Gln	Glu	Gln	Glu	Asp	Leu	Phe	Ile	Val	Lys	Val	Glu	Glu
			20					25				30			
Glu	Asp	Cys	Thr	Trp	Met	Gln	Glu	Tyr	Asn	Pro	Pro	Thr	Phe	Glu	Thr

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  50              55              60
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  65              70              75              80
Pro Glu Leu His Thr Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu
      85              90              95
Gln Phe Leu Thr Ile Leu Pro Glu Glu Phe Gln Pro Trp Val Arg Glu
  100              105              110
His His Pro Glu Ser Gly Glu Glu Ala Val Ala Val Ile Glu Asn Ile
  115              120              125
Gln Arg Glu Leu Glu Glu Arg Gln Gln Ile Val Ala Cys Pro Asp
  130              135              140
Val Leu Pro Arg Lys Met Ala Thr Pro Gly Ala Val Gln Glu Ser Cys
  145              150              155              160
Ser Pro His Pro Leu Thr Val Asp Thr Gln Pro Glu Gln Ala Pro Gln
      165              170              175
Lys Pro Arg Leu Leu Glu Glu Asn Ala Leu Pro Val Leu Gln Val Pro
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Ser Leu Pro Leu Lys Asp Ser Gln Glu Leu Thr Ala Ser Leu Leu Ser
  195              200              205
Thr Gly Ser Gln Lys Leu Val Lys Ile Glu Glu Val Ala Asp Val Ala
  210              215              220
Val Ser Phe Ile Leu Glu Trp Gly His Leu Asp Gln Ser Gln Lys
  225              230              235              240
Ser Leu Tyr Arg Asp Asp Arg Lys Glu Asn Tyr Gly Ser Ile Thr Ser
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Met Gly Tyr Glu Ser Arg Asp Asn Met Glu Leu Ile Val Lys Gln Ile
  260              265              270
Ser Asp Asp Ser Glu Ser His Trp Val Ala Pro Glu His Thr Glu Arg
  275              280              285
Ser Val Pro Gln Asp Pro Asp Phe Ala Glu Val Ser Asp Leu Lys Gly
  290              295              300
Met Val Gln Arg Trp Gln Val Asn Pro Thr Val Gly Lys Ser Arg Gln
  305              310              315              320
Asn Pro Ser Gln Lys Arg Asp Leu Asp Ala Ile Thr Asp Ile Ser Pro
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Lys Gln Ser Thr His Gly Glu Arg Gly His Arg Cys Ser Asp Cys Gly
  340              345              350
Lys Phe Phe Leu Gln Ala Ser Asn Phe Ile Gln His Arg Arg Ile His
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Thr Gly Glu Lys Pro Phe Lys Cys Gly Glu Cys Gly Lys Ser Tyr Asn
  370              375              380
Gln Arg Val His Leu Thr Gln His Gln Arg Val His Thr Gly Glu Lys
  385              390              395              400
Pro Tyr Lys Cys Gln Val Cys Gly Lys Ala Phe Arg Val Ser Ser His
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Leu Val Gln His His Ser Val His Ser Gly Glu Arg Pro Tyr Gly Cys
  420              425              430
Asn Glu Cys Gly Lys Asn Phe Gly Arg His Ser His Leu Ile Glu His
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Leu Lys Arg His Phe Arg Glu Lys Ser Gln Arg Cys Ser Asp Lys Arg
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Ser Lys Asn Thr Lys Leu Ser Val Lys Lys Lys Ile Ser Glu Tyr Ser

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Lys Gln Gly Ile Pro Met Lys Glu Ile Leu Gly Gln Pro Ser Ser Lys
          515          520          525
Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr
          530          535          540
Gly Glu Arg Pro His Lys Cys Asn Glu Cys Gly Lys Ser Phe Ile Gln
545          550          555          560
Ser Ala His Leu Ile Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
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Phe Arg Cys Glu Glu Cys Gly Lys Ser Tyr Asn Gln Arg Val His Leu
          580          585          590
Thr Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Thr Cys Pro
          595          600          605
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610          615          620
Ser Val His Ser Gly Glu Arg Pro Phe Lys Cys Asn Glu Cys Gly Lys
625          630          635          640
Gly Phe Gly Arg Arg Ser His Leu Ala Gly His Leu Arg Leu His Ser
          645          650          655
Arg Glu Lys Ser His Gln Cys Arg Glu Cys Gly Glu Ile Phe Phe Gln
          660          665          670
Tyr Val Ser Leu Ile Glu His Gln Val Leu His Met Gly Gln Lys Asn
          675          680          685
Glu Lys Asn Gly Ile Cys Glu Glu Ala Tyr Ser Trp Asn Leu Thr Val
690          695          700
Ile Glu Asp Lys Lys Ile Glu Leu Gln Glu Gln Pro Tyr Gln Cys Asp
705          710          715          720
Ile Cys Gly Lys Ala Phe Gly Tyr Ser Ser Asp Leu Ile Gln His Tyr
          725          730          735
Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu
          740          745          750
Asn Val Gly Gln Cys Ser His Thr Lys Gln His Gln Lys Ile Tyr Ser
          755          760          765
Ser Thr Lys Ser His Gln Cys His Glu Cys Gly Arg Gly Phe Thr Leu
          770          775          780
Lys Ser His Leu Asn Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
785          790          795          800
Phe Gln Cys Lys Glu Cys Gly Met Asn Phe Ser Trp Ser Cys Ser Leu
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Phe Lys His Leu Arg Ser His Glu Arg Thr Asp Pro Ile Asn Thr Leu
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Ser Val Glu Gly Ser Leu Leu
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<210> 6091  
 <211> 1336  
 <212> DNA  
 <213> Homo sapiens

<400> 6091

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180  
ccccacccc cccccccaga gaaatagaag cagaggcatt atcttttttt tctacaaaaa  
240  
agtaggaaaa gtagaaaaag tacaaagaag caacttctcg gctgtgttta agtttacaaa  
300  
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660  
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&lt;210&gt; 6092

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6092

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Pro	Thr	Thr	Trp	His	Ser	Arg	Gly	Gln	Gly	Arg	Ser	Pro	Ala	Ser	Gln
		20		25		30									
Thr	Pro	Asn	Trp	Tyr	Trp	Val	Leu	Gly	His	Pro	Asn	Leu	Ile	Arg	Asp
	35			40		45									
Val	Thr	Arg	Gln	Val	Pro	Ser	Pro	Pro	Ser	Gly	Phe	Arg	Leu	Pro	Ser
	50			55		60									
Ser	Arg	His	Glu	Gly	Pro	Ser	Pro	Pro	Arg	Asp	Leu	Gly	Thr	Ser	Gly
65				70		75								80	
Pro	Ser	Arg	Ala	Ala	Ser	His	Lys	Pro	Ser	Asn	Glu	Gln	Arg	Asp	Ala
			85			90								95	
Gly	Gln	Gln	Leu	Gln	Leu	His	Leu	Leu	Pro	Ala	Leu	Lys	Gly	Ser	Phe
			100			105								110	
Pro	Ala	Ser	Val	Leu	Ser										
			115												

&lt;210&gt; 6093

&lt;211&gt; 1998

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6093

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 1998

&lt;210&gt; 6094

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6094

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			20					25					30		
Thr	Gly	Pro	Val	Ser	Gln	Ser	Phe	Leu	Gln	Met	Leu	Ile	Gly	Val	Cys
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Trp	Asn	Pro	Lys	Pro	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Asp	Gly	Leu	Leu
		50				55				60					
Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
65				70						75				80	
Val	His	Pro	Cys	Thr	Leu	Val	Leu	Ser	Gln	Pro	Leu	Pro	His	Ile	Val

				85					90					95					
Pro	Asp	Ser	Arg	Gly	Thr	Ser	Ser	Leu	His	Arg	Ala	Ala	Ala	Ala	Gly				
				100				105						110					
Leu	Arg	Ala	Glu	Pro	Val	Gly	Ala	Glu	Ala	Leu	Ala	Pro	Glu	Val	Gln				
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&lt;210&gt; 6095

&lt;211&gt; 441

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6095

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441

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&lt;210&gt; 6096

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6096

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Lys	Lys	Trp	Asn	Ala	Val	Ala	Met	Trp	Ser	Trp	Asp	Val	Glu	Cys	Asp				
		35				40					45								
Thr	Cys	Ala	Ile	Cys	Arg	Val	Gln	Val	Met	Val	Val	Trp	Gly	Glu	Cys				
	50				55				60										
Asn	His	Ser	Phe	His	Asn	Cys	Cys	Met	Ser	Leu	Trp	Val	Lys	Gln	Asn				
65				70				75						80					
Asn	Arg	Cys	Pro	Leu	Cys	Gln	Gln	Asp	Trp	Val	Val	Gln	Arg	Ile	Gly				
			85					90						95					

Lys

&lt;210&gt; 6097

&lt;211&gt; 2404

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6097

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&lt;210&gt; 6098

&lt;211&gt; 631

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6098

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Arg	Ser	Gly	Asp	Val	Ile	Glu	Tyr	Leu	Leu	Lys	Asn	Gln	Trp	Phe	Val
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Arg	Cys	Gln	Glu	Met	Gly	Ala	Arg	Ala	Ala	Lys	Ala	Val	Glu	Ser	Gly
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Ala	Leu	Glu	Leu	Ser	Pro	Ser	Phe	His	Gln	Lys	Asn	Trp	Gln	His	Trp
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Phe	Ser	His	Ile	Gly	Asp	Trp	Cys	Val	Ser	Arg	Gln	Leu	Trp	Trp	Gly
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His	Gln	Ile	Pro	Ala	Tyr	Leu	Val	Xaa	Xaa	Gly	Pro	Cys	Ala	Xaa	Gly
		100				105						110			
Glu	Glu	Xaa	Thr	Cys	Trp	Val	Val	Gly	Arg	Ser	Gly	Ala	Glu	Ala	Arg

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Glu Arg Asp Pro Asp Val Leu Asp Thr Trp Phe Ser Ser Ala Leu Phe
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Pro Phe Ser Ala Leu Gly Trp Pro Gln Glu Thr Pro Asp Leu Ala Arg
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Phe Tyr Pro Leu Ser Leu Leu Glu Thr Gly Ser Asp Leu Leu Leu Phe
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Trp Val Gly Arg Met Val Met Leu Gly Thr Gln Leu Thr Gly Gln Leu
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Pro Phe Ser Lys Val Leu Leu His Pro Met Val Arg Asp Arg Gln Gly
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Arg Lys Met Ser Lys Ser Leu Gly Asn Val Leu Asp Pro Arg Asp Ile
225      230      235      240
Ile Ser Gly Val Glu Met Gln Leu Leu Gln Glu Lys Leu Arg Ser Gly
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Asn Leu Asp Pro Ala Glu Leu Ala Ile Val Ala Ala Ala Gln Lys Lys
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Asp Phe Pro His Gly Ile Pro Glu Cys Gly Thr Asp Ala Leu Arg Phe
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Thr Leu Cys Ser His Gly Val Gln Ala Gly Asp Leu His Leu Ser Val
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Glu Leu Ser Leu Val Thr His Ala Leu His His Phe Trp Leu His Asn
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Leu Cys Asp Val Tyr Leu Glu Ala Val Lys Pro Val Leu Trp His Ser
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Pro Arg Pro Leu Gly Pro Pro Gln Val Leu Phe Ser Cys Ala Asp Leu
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Gly Leu Arg Leu Leu Ala Pro Leu Met Pro Phe Leu Ala Glu Glu Leu
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Trp Gln Arg Leu Pro Pro Arg Pro Gly Cys Pro Pro Ala Pro Ser Ile
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Thr	Gln	Arg	Gln	Gln	Lys	Leu	Ser	Ser	Leu	Gln	Leu	Glu	Leu	Ser	Lys
		595				600								605	
Leu	Asp	Lys	Ala	Ala	Ser	His	Leu	Arg	Gln	Leu	Met	Asp	Glu	Pro	Pro
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&lt;210&gt; 6099

&lt;211&gt; 3957

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6099

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&lt;210&gt; 6100

&lt;211&gt; 1102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6100

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Lys Val Ala Ile Lys Ile Ile Asp Lys Thr Gln Leu Asp Glu Glu Asn
      85              90              95
Leu Lys Lys Ile Phe Arg Glu Val Gln Ile Met Lys Met Leu Cys His
      100              105              110
Pro His Ile Ile Arg Leu Tyr Gln Val Met Glu Thr Glu Arg Met Ile
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Tyr Leu Val Thr Glu Tyr Ala Ser Gly Gly Glu Ile Phe Asp His Leu
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Val Ala His Gly Arg Met Ala Glu Lys Glu Ala Arg Arg Lys Phe Lys
      145              150              155              160
Gln Ile Val Thr Ala Val Tyr Phe Cys His Cys Arg Asn Ile Val His
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Arg Asp Leu Lys Ala Glu Asn Leu Leu Leu Asp Ala Asn Leu Asn Ile
      180              185              190
Lys Ile Ala Asp Phe Gly Phe Ser Asn Leu Phe Thr Pro Gly Gln Leu
      195              200              205
Leu Lys Thr Trp Cys Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe
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Glu Gly Lys Glu Tyr Asp Gly Pro Lys Val Asp Ile Trp Ser Leu Gly
      225              230              235              240
Val Val Leu Tyr Val Leu Val Cys Gly Ala Leu Pro Phe Asp Gly Ser
      245              250              255
Thr Leu Gln Asn Leu Arg Ala Arg Val Leu Ser Gly Lys Phe Arg Ile
      260              265              270
Pro Phe Phe Met Ser Thr Glu Cys Glu His Leu Ile Arg His Met Leu
      275              280              285
Val Leu Asp Pro Asn Lys Arg Leu Ser Met Glu Gln Ile Cys Lys His
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Lys Trp Met Lys Leu Gly Asp Ala Asp Pro Asn Phe Asp Arg Leu Ile
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Ala Glu Cys Gln Gln Leu Lys Glu Glu Arg Gln Val Asp Pro Leu Asn
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Glu Asp Val Leu Leu Ala Met Glu Asp Met Gly Leu Asp Lys Glu Gln
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Thr Leu Gln Ala Glu Gln Ala Gly Thr Ala Met Asn Ile Ser Val Pro
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Gln Val Gln Leu Ile Asn Pro Glu Asn Gln Ile Val Glu Pro Asp Gly
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Thr Leu Asn Leu Asp Ser Asp Glu Gly Glu Glu Pro Ser Pro Glu Ala
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Leu Val Arg Tyr Leu Ser Met Arg Arg His Thr Val Gly Val Ala Asp
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Pro Arg Thr Glu Val Met Glu Asp Leu Gln Lys Leu Leu Pro Gly Phe
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Pro Gly Val Asn Pro Gln Ala Pro Phe Leu Gln Val Ala Pro Asn Val
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Asn Phe Met His Asn Leu Leu Pro Met Gln Asn Leu Gln Pro Thr Gly
      450              455              460
Gln Leu Glu Tyr Lys Glu Gln Ser Leu Leu Gln Pro Pro Thr Leu Gln

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 Pro Ser Pro Leu Val Thr Met Thr Pro Ala Val Pro Ala Val Thr Pro  
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 Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln  
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 Ser Ser Thr Tyr Lys Asp Ser Asn Thr Leu His Leu Pro Thr Glu Arg  
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 Phe Ser Pro Val Arg Arg Phe Ser Asp Gly Ala Ala Ser Ile Gln Ala  
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 Phe Lys Ala His Leu Glu Lys Met Gly Asn Asn Ser Ser Ile Lys Gln  
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 Leu Gln Gln Glu Cys Glu Gln Leu Gln Lys Met Tyr Gly Gly Gln Ile  
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 Asp Glu Arg Thr Leu Glu Lys Thr Gln Gln Gln His Met Leu Tyr Gln  
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 Gln Glu Gln His His Gln Ile Leu Gln Gln Gln Ile Gln Asp Ser Ile  
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 Cys Pro Pro Gln Pro Ser Pro Pro Leu Gln Ala Ala Cys Glu Asn Gln  
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 Pro Ala Leu Leu Thr His Gln Leu Gln Arg Leu Arg Ile Gln Pro Ser  
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 Ser Pro Pro Pro Asn His Pro Asn Asn His Leu Phe Arg Gln Pro Ser  
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 Asn Ser Pro Pro Pro Met Ser Ser Ala Met Ile Gln Pro His Gly Ala  
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 Leu Asn Val Asn Arg Phe Ser Pro Ala Asn Tyr Asp Gln Ala His Leu  
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 Pro Pro His Tyr Thr Thr Ser Ala Leu Gln Gln Ala Leu Leu Ser Pro  
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 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 6102  
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 35 40 45  
 Ile His Leu Gly Pro Arg Gln Ala Val Arg Pro Ser Val Arg Ala Glu  
 50 55 60  
 Ser Arg Arg Val Asp Gly Gly Gly Arg Ser Pro Arg Glu Pro Asp Gly  
 65 70 75 80  
 Arg Gly Arg Ser Arg Gln Ala Arg Phe Ser Pro Tyr Pro Ile Pro Ala  
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<210> 6103  
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6103

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&lt;210&gt; 6104

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6104

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      20             25             30
Leu Asn Arg Leu Gln Tyr Ala Val Ile Ser Glu Ala Trp Arg Leu Val
      35             40             45
Glu Glu Glu Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser Asp
      50             55             60
Gly Leu Gly Met Arg Tyr Ala
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&lt;210&gt; 6105

&lt;211&gt; 1846

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6105

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1846

&lt;210&gt; 6106

&lt;211&gt; 405

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6106  
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Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe  
35 40 45  
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala  
50 55 60  
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Arg His Arg Lys  
65 70 75 80  
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly  
85 90 95  
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His  
100 105 110  
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys  
115 120 125  
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser  
130 135 140  
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly  
145 150 155 160  
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser  
165 170 175  
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp  
180 185 190  
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser  
195 200 205  
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala  
210 215 220  
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro  
225 230 235 240  
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro  
245 250 255  
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val  
260 265 270  
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr  
275 280 285  
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His  
290 295 300  
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr  
305 310 315 320  
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp  
325 330 335  
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn  
340 345 350  
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr  
355 360 365  
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His  
370 375 380  
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385 390 395 400  
Arg Ser Pro Ser His  
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<210> 6107  
 <211> 896  
 <212> DNA  
 <213> Homo sapiens

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<210> 6108  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 6108  
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 20 25 30  
 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg  
 35 40 45  
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro  
 50 55 60  
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly  
 65 70 75 80  
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

				85						90						95			
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile				
			100					105					110						
Ala	Pro	Arg	Ser	Trp	Leu	Leu	Pro	Leu	Ser	Ala	Thr								
			115				120												

&lt;210&gt; 6109

&lt;211&gt; 2087

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6109

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1260

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 1980  
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 2087

<210> 6110  
 <211> 323  
 <212> PRT  
 <213> Homo sapiens

<400> 6110  
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 35 40 45  
 Cys Val Leu Arg Arg Pro Gly Ala Asn His Glu Gly Ser Ala Ser Arg  
 50 55 60  
 Gln Lys Ala Leu Ser Leu Val Ser Cys Phe Ala Gly Gly Val Phe Leu  
 65 70 75 80  
 Ala Thr Cys Leu Leu Asp Leu Leu Pro Asp Tyr Leu Ala Ala Ile Asp  
 85 90 95  
 Glu Ala Leu Ala Ala Leu His Val Thr Leu Gln Phe Pro Leu Gln Glu  
 100 105 110  
 Phe Ile Leu Ala Met Gly Phe Phe Leu Val Leu Val Met Glu Gln Ile  
 115 120 125  
 Thr Leu Ala Tyr Lys Glu Gln Ser Gly Pro Ser Pro Leu Glu Glu Thr  
 130 135 140  
 Arg Ala Leu Leu Gly Thr Val Asn Gly Gly Pro Gln His Trp His Asp

145		150		155		160									
Gly	Pro	Gly	Val	Pro	Gln	Ala	Ser	Gly	Ala	Pro	Ala	Thr	Pro	Ser	Ala
		165				170								175	
Leu	Arg	Ala	Cys	Val	Leu	Val	Phe	Ser	Leu	Ala	Leu	His	Ser	Val	Phe
		180						185					190		
Glu	Gly	Leu	Ala	Val	Gly	Leu	Gln	Arg	Asp	Arg	Ala	Arg	Ala	Met	Glu
		195					200					205			
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Ser	Leu	Arg	Leu	Leu	Gln	Ser	His	Leu	Arg	Ala	Gln	Val	Val	Ala	Gly
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	275						280					285			
Glu	Ile	Leu	Pro	Gln	Glu	Leu	Ala	Ser	Ser	Glu	Gln	Arg	Ile	Leu	Lys
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Val	Ile	Leu	Leu	Leu	Ala	Gly	Phe	Ala	Leu	Leu	Thr	Gly	Leu	Leu	Phe
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Ile	Gln	Ile													

&lt;210&gt; 6111

&lt;211&gt; 1706

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6111

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&lt;210&gt; 6112

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6112

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Val	Ala	Gln	Ala	Gly	Val	Xaa	Trp	His	Ser	Leu	Gly	Ser	Leu	Gln	Pro
			20					25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
		35				40					45				
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55				60					
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65					70					75				80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
				85					90					95	
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113  
<211> 1095  
<212> DNA  
<213> Homo sapiens

<400> 6113  
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120  
acgtggcgcgc agcggaggca ggttgatgtg tttgtgcttc cttctacagc caatatgaaa  
180  
aggcctagta agtggggtcg ggaggcgggc gtggaggggac ccacgtctgg aagttgctgc  
240  
agccaccacg acgctcttct acggctacgg ctttgtctct gctgggtatgg ggggtgggagc  
300  
atacgcgtag gccttgcccc tatttctctgg tagaaccgag agttggaagt ccctacggcg  
360  
atcatgttaa ccgcgcgggc tcattctgcg gaacgaagcc gggcagaggg tggggaagac  
420  
taggctagat ttctgtaagg aagcagcgtc tgagccaggt ttgaggccca atattttctt  
480  
tccgtggcca cgtgcagact ggcccagggt agagctgaga atcgccctccc agactcagtg  
540  
ttcctctcct gccttatgat tcgtgctggt tgacacgaag tggttgtcgt tttgtgtctc  
600  
atacgctggt gtgtatgatc ccatttctaatt attgtgaggg taagtgcagg gaattttgac  
660  
tccattctgg atctactgaa tttaattctc tgggatttga aagtagcacg tatgtttgca  
720  
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780  
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840  
ttctttgtag agttaagaa agcaagtaaa cgcattgacct gccataagcg gtataaaatc  
900  
caaaaaaagg ttcgagaaca tcattcgaaaa ttaagaaagg aggctaaaaa gcgggggtcac  
960  
aagaagccta ggaaagaccc aggagttcca aacagtgtc cttttaagga ggctcttctt  
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1080  
aggcagaagg aacta  
1095

<210> 6114  
<211> 87  
<212> PRT  
<213> Homo sapiens

<400> 6114  
Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys



```

      1             5             10             15
His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys
      20             25             30
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
      35             40             45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
      50             55             60
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys
      65             70             75             80
Leu Asp Arg Gln Lys Glu Leu
      85

```

&lt;210&gt; 6115

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6115

```

gcgcgcctgg ccccgccagg gcctaagttc cctgcactcg cttccccgcc tgcgcgcgcc
60
gccgcgcgcc gcagccctcc ttctcgtggg cgctggggaa gaaactcgtc ggcgggtcta
120
actgtggcgt cccagggcgg tggagggagc aacttcgggg gcacgtcctc gtaaattccg
180
tggaggacac tgaccctgta cccaccctc gaggccagaa gtcggttctt ttgggggaac
240
tgaggggcga gagcactcgc cccctgact tgcaaagttg gcgtctttac ttggcctccg
300
ggattctgcg catggcgtgt ctccaggctg ctgatgggca agacagatgt gccaggtcca
360
gaatgaactt gagaagagtt tgtagccatt cctgaatcac cttatactag t
411

```

&lt;210&gt; 6116

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6116

```

Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val
      1             5             10             15
Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly
      20             25             30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
      35             40             45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
      50             55             60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
      65             70             75             80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
      85             90             95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala
      100            105            110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

```

115 120 125

Arg

<210> 6117  
 <211> 962  
 <212> DNA  
 <213> Homo sapiens

<400> 6117  
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 gtggaagacg gagaggaaac ctgcgccctg gcctctcact ccgggagctc aggctccaag  
 120  
 tcgggaggcg acaagatggt ctccctcaag aagtggaaac cggtggccat gtggagctgg  
 180  
 gacgtggagt gcgatacgtg cgccatctgc agggccagg tgatggatgc ctgtcttaga  
 240  
 tgtcaagctg aaaacaaaca agaggactgt gttgtggtct ggggagaatg taatcattcc  
 300  
 ttccacaact gctgcatgtc cctgtgggtg aaacagaaca atcgctgccc tctctgccag  
 360  
 caggactggg tgggtccaaag aatcggtcaa tgagagtggg tagaaggctt cttagcgcag  
 420  
 ttgttcagag ccctggtgga tcttgtaatc cagtgcccta caaaggctag aacactacag  
 480  
 gggatgaatt cttcaaatag gagccgatgg atctgtggtc ctttgggact catcaaagcc  
 540  
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 attaaaggtg gtccttcta cctctgtggt gtgtgtcgcg cacacagctt agaagtgcta  
 660  
 taataaagga aagagctcca aattgaatca cctttataat ttacccattt ctatacaaca  
 720  
 ggcagtggaa gcagtttcag agaacttttt gcatgcttat ggttgatcag ttaaaaaaga  
 780  
 atgttacagt aacaaataaa gtgcagttta aaaccaact cttactctta atttgttctt  
 840  
 aatacgtatt tttggcaggg agagggaacg gtccatgaaa tctttatgtg atataaggat  
 900  
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 960  
 aa  
 962

<210> 6118  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 6118  
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 1 5 10 15  
 Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu

```

          20          25          30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
          35          40          45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Leu Arg Cys
          50          55          60
Gln Ala Glu Asn Lys Gln Glu Asp Cys Val Val Val Trp Gly Glu Cys
65          70          75          80
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
          85          90          95
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
          100          105          110
Lys

```

<210> 6119  
 <211> 375  
 <212> DNA  
 <213> Homo sapiens

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<400> 6119
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ccccacacc ccacacggac tgcacggaaa taccacagta accatctctc agtcacagcg
120
tggccccaca gaactcatgc ctgcttgctt taaaccacc aatgaaaact ccccatggga
180
aacctgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtcctctgtc
240
tctgcctctc tcttgccctt acccactggg tgagcatgtg tgtcccaaac ggcctgcaa
300
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360
tgtgtcatgt tgtgc
375

```

<210> 6120  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

```

<400> 6120
Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His
1          5          10          15
Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser
          20          25          30
Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn
          35          40          45
Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn
          50          55          60
Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro
65          70          75          80
Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys
          85          90          95
Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu Leu

```

100  
Cys Asp Val Ser Cys Cys  
115

105

110

<210> 6121  
<211> 1039  
<212> DNA  
<213> Homo sapiens

<400> 6121  
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120  
aagaacact ctcttctgc cacatttgtt ttgagctaaa tattgagggg gtaccaaagt  
180  
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240  
taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta  
300  
aaaccatddd gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg  
360  
attcagattc tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggcataagc  
420  
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaaatgga  
480  
tagatggaag tgcagggtggc atctctaact gtacacaaaag aattttggag cagagggaaa  
540  
atacagactt tggactttct atgttacaag attcagggtgc cactttatgt cgtaacagtg  
600  
tattgtggcc tcatagtcac aaccaggcac agaaaaaaga agagacaatc tctagtccag  
660  
aggctaagt ccagacccag catccacatt acagcagaga ggaataagtt tttgaagagt  
720  
taactacca agtgcaagaa aaagattctt tggcctcaca gctccatgtc cgccacgttg  
780  
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900  
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960  
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1020  
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1039

<210> 6122  
<211> 221  
<212> PRT  
<213> Homo sapiens

<400> 6122  
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Ile Cys Ser Val Cys Lys Leu Gly Thr Asp Lys Glu Thr Leu Ser Phe			
20	25	30	
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp			
35	40	45	
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys			
50	55	60	
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys			
65	70	75	80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp			
85	90	95	
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys			
100	105	110	
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu			
115	120	125	
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala			
130	135	140	
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg			
145	150	155	160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln			
165	170	175	
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser			
180	185	190	
His Asn Gln Ala Gln Lys Lys Glu Thr Ile Ser Ser Pro Glu Ala			
195	200	205	
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu			
210	215	220	

<210> 6123  
 <211> 900  
 <212> DNA  
 <213> Homo sapiens

<400> 6123  
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 180  
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 240  
 aacaagcctc caggctctgct tccccgcaa ggactataca tggcaaata cttaaagctc  
 300  
 ctgagacacc atctccagat tcccatccac tcccccaagg atttcttgtc tgtgatgctt  
 360  
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 420  
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 480  
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ccgcaccgcc ttctgtctgt cttctcttct tcccagaatg aagacatcac cgagccgcag  
 660  
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 720  
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 780  
 agatacggag cttttgggct gcccatacacc gtggcccatg tggatggcca aaccacatg  
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 900

<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

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Arg	Leu	Asn	Pro	Gly	Gly	Gly	Gly	Cys	Gly	Glu	Leu	Arg	Ser	His	His
		20						25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35					40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55					60				
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65				70						75					80
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
				85					90					95	
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
			100					105					110		
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
		115					120					125			
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
	130					135					140				
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145					150					155					160
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
				165					170					175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
			180					185					190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
		195					200					205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210					215					220				
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225					230					235					240
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
				245					250					255	
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
		260						265					270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
		275					280					285			
Leu	Leu	Ala	His	Leu	Leu	Gly	Glu	Lys	Trp	Met	Gly				

290

295

300

&lt;210&gt; 6125

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6125

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nctacagtca ctcaggagaa gtcccgcatg gaggccttctt acttggctga caagaaaaag
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468

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&lt;210&gt; 6126

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6126

```

Xaa Thr Val Thr Gln Glu Lys Ser Arg Met Glu Ala Ser Tyr Leu Ala
1           5           10           15
Asp Lys Lys Lys Met Lys Gln Asp Leu Glu Asp Ala Ser Asn Lys Ala
20           25           30
Glu Glu Glu Arg Ala Arg Leu Glu Gly Glu Leu Lys Gly Leu Gln Glu
35           40           45
Gln Ile Ala Glu Thr Lys Ala Arg Leu Ile Thr Gln Gln His Asp Arg
50           55           60
Ala Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys
65           70           75           80
Leu Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu
85           90           95
Glu Glu Thr Arg Glu Ala Leu Ala Gly Arg Ala Tyr Ala Ala Glu Gln
100          105          110
Met Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu
115          120          125
Glu Leu Lys Ser Glu Leu Gln Ala Ile Arg Asp Glu Lys Asn Gln Pro
130          135          140
Asp Pro Arg Leu Gln Glu Leu Gln Glu Glu Ala Ala
145          150          155

```

&lt;210&gt; 6127

&lt;211&gt; 1900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6127

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gtgaatgcga tccggagtgc ccgcagcgcc ttctgcctga cggccatggg catgatgcag
1500

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 1900

&lt;210&gt; 6128

&lt;211&gt; 530

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6128

Val	Ser	Trp	Ile	Thr	Gly	Gln	Ala	Xaa	Glu	Ile	Gly	Ser	Xaa	Ser	Leu
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			20					25					30		
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
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Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His	Ala	His	Ala
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Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
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Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
			85						90					95	
Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
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Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
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Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
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Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
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Val	Thr	Val	Ala	Ala	Ala	Ala	Val	Thr	Ala	Ala	Ala	Thr	Val	Val	Pro
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Gly	His	Ser	Pro	Gly	Leu	His	Pro	Tyr	Thr	Ala	Leu	Gln	Pro	His	Leu
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Pro	Cys	Ser	Pro	Gln	Tyr	Leu	Thr	His	Pro	Ala	His	Pro	Ala	His	Pro
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Met	Pro	His	Met	Pro	Arg	Pro	Ala	Val	Phe	Pro	Val	Pro	Ser	Ser	Ala
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Tyr	Pro	Gln	Gly	Val	His	Pro	Ala	Phe	Leu	Gly	Ala	Gln	Tyr	Pro	Tyr
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Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser Pro Leu Val Ser Gly Gly
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Phe Pro Pro Pro Glu Glu Glu Thr His Ser Gln Pro Val Asn Pro His
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Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser
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Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala
385                390                395                400
Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala
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Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr
                420                425                430
Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro
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Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr
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Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe
465                470                475                480
Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met
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Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys
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Gln Thr Lys Glu Leu Trp Gln Arg Val Ser Leu Glu Met Ala Thr Phe
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Ser Pro
                530

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&lt;210&gt; 6129

&lt;211&gt; 2012

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6129

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<210> 6130

<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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Gly Pro Arg Leu Phe Leu Leu Gln Gln Pro Leu Ala Pro Ser Gly Leu
 35          40          45
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 50          55          60
Thr Tyr Ile Phe Val Tyr Glu Asn Pro Ile Ser Leu Leu Cys Gly Ala
 65          70          75          80
Ile Ile Ile Trp Arg Phe Ala Gly Asn Phe Glu Arg Thr Val Gly Thr
 85          90          95
Val Arg His Cys Phe Phe Thr Val Ile Phe Ala Ile Phe Ser Ala Ile
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Ile Phe Leu Ser Phe Glu Ala Val Ser Ser Leu Ser Lys Leu Gly Glu
 115         120         125
Val Glu Asp Ala Arg Gly Phe Thr Pro Val Ala Phe Ala Met Leu Gly
 130         135         140
Val Thr Thr Val Arg Ser Arg Met Arg Arg Ala Leu Val Phe Gly Met
 145         150         155         160
Val Val Pro Ser Val Leu Val Pro Trp Leu Leu Leu Gly Ala Ser Trp
 165         170         175
Leu Ile Pro Gln Thr Ser Phe Leu Ser Asn Val Cys Gly Leu Ser Ile
 180         185         190
Gly Leu Ala Tyr Gly Leu Thr Tyr Cys Tyr Ser Ile Asp Leu Ser Glu
 195         200         205
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 210         215         220
Arg Ile Ser Val Phe Lys Tyr Val Ser Gly Ser Ser Ala Glu Arg Arg
 225         230         235         240
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 245         250         255
Gln Ser Cys His Pro His Leu Ser Pro Ser His Pro Val Ser Gln Thr
 260         265         270
Gln His Ala Ser Gly Gln Lys Leu Ala Ser Trp Pro Ser Cys Thr Pro
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 290         295         300
Tyr Val Gln Asn His Phe Gly Pro Asn Pro Thr Ser Ser Ser Val Tyr
 305         310         315         320
Pro Ala Ser Ala Gly Thr Ser Leu Gly Ile Gln Pro Pro Thr Pro Val
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<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 6132

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6132

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Leu	Lys	Ile	Thr	Gln	Lys	Glu	Ser	Arg	Lys	Ser	Lys	Ser	Pro	Pro	Lys
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Val	Pro	Ile	Val	Ile	Gln	Asp	Asp	Ser	Leu	Pro	Ala	Gly	Pro	Pro	Pro
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Pro	Asn	Ser	Thr	Ser	Arg	Pro	Thr	Leu	Pro	Val	Lys	Ser	Leu	Ala	Gln
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Arg	Glu	Ala	Glu	Tyr	Ala	Glu	Ala	Arg	Lys	Arg	Ile	Leu	Gly	Ser	Ala
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Ser	Pro	Glu	Glu	Glu	Gln	Glu	Lys	Pro	Ile	Leu	Asp	Arg	Ser	Ser	Ser
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Asp	Leu	Leu	Pro	Phe	Arg	Pro	Thr	Arg	Ile	Ser	Gln	Pro	Glu	Asp	Ser
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&lt;210&gt; 6133

&lt;211&gt; 4156

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6133

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&lt;210&gt; 6134

&lt;211&gt; 595

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6134

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<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 6138

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6138

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Asp	Ile	Lys	Xaa	Ile	Lys	Cys	Gly	Thr	Xaa	Met	Glu	Lys	Glu	Phe	Gly
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<210> 6139
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<212> DNA
<213> Homo sapiens
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&lt;210&gt; 6140

&lt;211&gt; 381

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6140

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 Cys Lys Thr Arg Asp Asp Glu Pro Val Cys Gly Arg Pro Leu Gly Ile  
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 115 120 125  
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 Ser Glu Thr Pro Ile Glu Gly Lys Asn Met Ser Phe Val Asn Asp Leu  
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 Asp Gly Arg Leu Leu Glu Tyr Asp Thr Val Thr Arg Glu Val Lys Val  
 195 200 205  
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	260		265	270
Tyr Trp Val Gly Met Ser Thr Ile Arg Pro Asn Pro Gly Phe Ser Met				
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Leu Asp Phe Leu Ser Glu Arg Pro Trp Ile Lys Arg Met Ile Phe Lys				
	290		295	300
Gly Ser Cys Ala Gly Cys Asp Leu Leu Phe Ser Gln Glu Thr Val Met				
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&lt;210&gt; 6141

&lt;211&gt; 5651

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6141

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<212> PRT  
<213> Homo sapiens

<400> 6142

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Ser Pro Gly Arg Thr Glu Gln Pro Pro Pro Ser Pro Gln Ser Ser Ser
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Gly Phe Leu Tyr Arg Arg Leu Lys Thr Gln Glu Lys Arg Glu Met Gln
 65          70          75          80
Lys Glu Ile Leu Ser Val Leu Gly Leu Pro His Arg Pro Arg Pro Leu
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His Gly Leu Gln Gln Pro Gln Pro Pro Ala Leu Arg Gln Gln Glu Glu
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Gln Gln Gln Gln Gln Leu Pro Arg Gly Glu Pro Pro Pro Gly Arg
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Ala Asp Asn Asp Glu Asp Gly Ala Ser Glu Gly Glu Arg Gln Gln Ser
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Gly Ala Ala His Pro Leu Asn Arg Lys Ser Leu Leu Ala Pro Gly Ser
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Gly Ser Gly Gly Ala Ser Pro Leu Thr Ser Ala Gln Asp Ser Ala Phe
195          200          205
Leu Asn Asp Ala Asp Met Val Met Ser Phe Val Asn Leu Val Glu Tyr
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Asp Lys Glu Phe Ser Pro Arg Gln Arg His His Lys Glu Phe Lys Phe
225          230          235          240
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Arg Ile Tyr Lys Asp Cys Val Met Gly Ser Phe Lys Asn Gln Thr Phe
260          265          270
Leu Ile Ser Ile Tyr Gln Val Leu Gln Glu His Gln His Arg Asp Ser
275          280          285
Asp Leu Phe Leu Leu Asp Thr Arg Val Val Trp Ala Ser Glu Glu Gly
290          295          300
Trp Leu Glu Phe Asp Ile Thr Ala Thr Ser Asn Leu Trp Val Val Thr
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Pro Gln His Asn Met Gly Leu Gln Leu Ser Val Val Thr Arg Asp Gly
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Pro Lys Gly Tyr Ala Ala Asn Tyr Cys Asp Gly Glu Cys Ser Phe Pro
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&lt;210&gt; 6143

&lt;211&gt; 1137

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6143

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<211> 141

<212> PRT

<213> Homo sapiens

<400> 6144

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Ala	Gly	Pro	Glu	Leu	Gly	Gly	Gln	Gly	Ile	Pro	Ser	Pro	Gly	Cys
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Cys	Gln	Arg	Gly	Glu	Ala	Gly	Gly	Gly	Gly	Asn	Ala	Val	Leu	Pro
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Glu	Ser	Val	Leu	Arg	Ala	Ser	Ala	Val	Gly	Arg	Gly	Ala	Glu	Gly
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Gly	Ala	Leu	Thr	Arg	Ser	Gly	Ser	Gly	Ala	Ala	Ser	Ala	Leu	Val
		100						105					110	Arg
Pro	Gly	Glu	Lys	Gly	Cys	Trp	Cys	Arg	Thr	Ala	Ser	Gly	Ala	Gly
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<210> 6145

<211> 766

<212> DNA

<213> Homo sapiens

<400> 6145

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<400> 6146  
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 Asp Pro Cys Ala Pro Gln Val Lys Lys Gln Cys Pro Pro Lys Asp Thr  
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&lt;210&gt; 6148

<211> 410  
 <212> PRT  
 <213> Homo sapiens

<400> 6148

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Gly Trp Ile Lys Lys Gly Thr Asp Val Asp Val Gly Pro Phe Leu Asn
 35           40           45
Ser Leu Val Gln Glu Gly Glu Trp Glu Arg Ala Ala Ala Val Ala Leu
 50           55           60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
65           70           75           80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
      85           90           95
Ser Gly Tyr Thr Asp Glu Lys Asn Ser Leu Trp Arg Glu Met Cys Ser
      100           105           110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
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Phe Leu Thr Ser Glu Thr Gly Ser Tyr Asp Gly Val Leu Tyr Glu Asn
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Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
      165           170           175
Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
      180           185           190
Gly Val Asp Leu Met Glu Ser Tyr Val Asp Arg Thr Gly Asp Val Gln
      195           200           205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
      210           215           220
Asp Glu Arg Val Gln Tyr Trp Ile Glu Asn Tyr Arg Asn Leu Leu Asp
      225           230           235           240
Ala Trp Arg Phe Trp His Lys Arg Ala Glu Phe Asp Ile His Arg Ser
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Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
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Asn Phe Cys Gly Lys Ser Ile Ser Tyr Ser Cys Ser Ala Val Pro His
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Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
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Gly Thr Lys Ser Asp Glu Lys Val Asp Leu Ser Lys Asp Lys Lys Leu
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Ala Gln Phe Asn Asn Trp Phe Thr Trp Cys His Asn Cys Arg His Gly
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Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
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Pro Val Ser Ala Cys Thr Cys Lys Cys Met Gln Leu Asp Thr Thr Gly

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<210> 6149  
 <211> 1949  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 6150

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6150

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Leu	Ser	Ser	Asp	Met	Val	Glu	Lys	Gln	Thr	Gly	Lys	Lys	Asp	Lys	Asp
			20					25					30		
Lys	Val	Ser	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Glu	Arg	Gly	Asp	Gly	Gly
		35				40					45				
Lys	Glu	Val	Arg	Glu	Arg	Ala	Ser	Lys	Arg	Lys	Leu	Pro	Phe	Thr	Ala
	50					55					60				
Gly	Ala	Asn	Gly	Glu	Gln	Lys	Asp	Ser	Asp	Thr	Glu	Lys	Gln	Gly	Pro
65					70					75					80
Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
			85						90					95	
Leu	Phe	Gly	Met	Gly	Leu	Ser	Gly	Ile	Arg	Ala	Gly	Tyr	Pro	Leu	Ser
			100					105					110		
Glu	Arg	Gln	Gln	Val	Ala	Leu	Leu	Met	Gln	Met	Thr	Ala	Glu	Glu	Ser
		115					120					125			
Ala	Asn	Ser	Pro	Val	Asp	Thr	Thr	Pro	Lys	His	Pro	Ser	Gln	Ser	Thr
		130				135					140				
Val	Cys	Gln	Lys	Gly	Thr	Pro	Asn	Ser	Ala	Ser	Lys	Thr	Lys	Asp	Lys
145					150					155					160
Leu	Asn	Lys	Arg	Asn	Glu	Arg	Gly	Glu	Thr	Arg	Leu	His	Arg	Ala	Ala
			165					170						175	
Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
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<210> 6151
<211> 648
<212> DNA
<213> Homo sapiens
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5334

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<210> 6152

<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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Gln	Pro	Cys	Gly	Ser	Pro	Arg	Arg	Thr	Glu	Glu	Thr	Gly	Glu	Thr	Trp
			20					25					30		
Glu	Arg	Val	Ala	Phe	Ser	Leu	Phe	Thr	His	Thr	Cys	Thr	Gln	Pro	Leu
		35					40					45			
Ala	Gly	Thr	Val	Asp	Thr	His	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Val	Ile
	50					55					60				
Leu	His	Pro	Leu	Gly	Ala	Ala	Ser	Ala	Gly	Arg	Ala	Leu	Glu	Pro	Lys
65					70				75					80	
Ala	Asp	Pro	His	Thr	Cys	Pro	Tyr	Gly	Arg	Lys	Glu	Ser	Arg	Gly	Glu
			85					90						95	
Lys	Val	Arg	Arg	Gly	Arg	Ala	Lys	Ser	Asn	Ser	Gly	Pro	Asn	Val	Pro
			100					105					110		
Gly	Pro	Pro	Ala	Ala	Pro	Gln	Ser	Leu	Lys	Ser	Gly	Ser	Pro	Ser	Thr
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<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

<400> 6153

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cgtgcacaca cagccacagt gaggagtgtc cacttctgca gtgatggcca gtccttcgtg  
300  
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360  
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420  
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720  
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900  
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960  
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1080  
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1140  
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1200  
tgcaggtggc agggcagggg tttgtacat gggacttggg taaataaagg ggactgaact  
1260  
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1380  
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1680  
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1810



<210> 6154  
 <211> 388  
 <212> PRT  
 <213> Homo sapiens

<400> 6154

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			20					25					30		
Ser	Arg	Ala	Tyr	Arg	Phe	Thr	Gly	His	Lys	Asp	Ala	Val	Thr	Cys	Val
		35					40					45			
Asn	Phe	Ser	Pro	Ser	Gly	His	Leu	Leu	Ala	Ser	Gly	Ser	Arg	Asp	Lys
	50					55					60				
Thr	Val	Arg	Ile	Trp	Val	Pro	Asn	Val	Lys	Gly	Glu	Ser	Thr	Val	Phe
65					70					75					80
Arg	Ala	His	Thr	Ala	Thr	Val	Arg	Ser	Val	His	Phe	Cys	Ser	Asp	Gly
			85						90					95	
Gln	Ser	Phe	Val	Thr	Ala	Ser	Asp	Asp	Lys	Thr	Val	Lys	Val	Trp	Ala
			100					105					110		
Thr	His	Arg	Gln	Lys	Phe	Leu	Phe	Ser	Leu	Ser	Gln	His	Ile	Asn	Trp
		115					120					125			
Val	Arg	Cys	Ala	Lys	Phe	Ser	Pro	Asp	Gly	Arg	Leu	Ile	Val	Ser	Ala
	130					135					140				
Ser	Asp	Asp	Lys	Thr	Val	Lys	Leu	Trp	Asp	Lys	Ser	Ser	Arg	Glu	Cys
145					150					155					160
Val	His	Ser	Tyr	Cys	Glu	His	Gly	Gly	Phe	Val	Thr	Tyr	Val	Asp	Phe
			165						170					175	
His	Pro	Ser	Gly	Thr	Cys	Ile	Ala	Ala	Ala	Gly	Met	Asp	Asn	Thr	Val
			180					185					190		
Lys	Val	Trp	Asp	Val	Arg	Thr	His	Arg	Leu	Leu	Gln	His	Tyr	Gln	Leu
		195					200					205			
His	Ser	Ala	Ala	Val	Asn	Gly	Leu	Ser	Phe	His	Pro	Ser	Gly	Asn	Tyr
		210				215					220				
Leu	Ile	Thr	Ala	Ser	Ser	Asp	Ser	Thr	Leu	Lys	Ile	Leu	Asp	Leu	Met
225					230					235					240
Glu	Gly	Arg	Leu	Leu	Tyr	Thr	Leu	His	Gly	His	Gln	Gly	Pro	Ala	Thr
			245						250					255	
Thr	Val	Ala	Phe	Ser	Arg	Thr	Gly	Glu	Tyr	Phe	Ala	Ser	Gly	Gly	Ser
		260					265						270		
Asp	Glu	Gln	Val	Met	Val	Trp	Lys	Ser	Asn	Phe	Asp	Ile	Val	Asp	His
		275					280					285			
Gly	Glu	Val	Thr	Lys	Val	Pro	Arg	Pro	Pro	Ala	Thr	Leu	Ala	Ser	Ser
	290					295					300				
Met	Gly	Asn	Leu	Pro	Glu	Val	Asp	Phe	Pro	Val	Pro	Pro	Gly	Arg	Gly
305					310					315					320
Trp	Ser	Val	Glu	Ser	Val	Gln	Ser	Gln	Pro	Gln	Glu	Pro	Val	Ser	Val
			325						330					335	
Pro	Gln	Thr	Leu	Thr	Ser	Thr	Leu	Glu	His	Ile	Val	Gly	Gln	Leu	Asp
		340						345					350		
Val	Leu	Thr	Gln	Thr	Val	Ser	Ile	Leu	Glu	Gln	Arg	Leu	Thr	Leu	Thr
		355					360					365			
Glu	Asp	Lys	Leu	Lys	Gln	Cys	Leu	Glu	Asn	Gln	Gln	Leu	Ile	Met	Gln

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375

380

<210> 6155  
<211> 995  
<212> DNA  
<213> Homo sapiens

<400> 6155  
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120  
aataacagcg atttattatt aaggaaatga tacgcttttg tcccattcaa ataatgtttt  
180  
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240  
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300  
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780  
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840  
atggacttga aagggcatta aagattcctt aaacgtaacc gctgtgattc tagagttaca  
900  
gtaaaccacg attggaagaa actgcttcca gcatgctttt aatatgctgg gtgacccact  
960  
cctagacacc aagtttgaac tagaaacatt cagta  
995

<210> 6156  
<211> 164  
<212> PRT  
<213> Homo sapiens

<400> 6156  
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780
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840

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 2135

&lt;210&gt; 6158

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6158

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 Ala Ala Ser Gly Ile Tyr Phe Tyr Ser Asn Lys Tyr Leu Asp Pro Asn

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Asp	Phe	Gly	Ala	Val	Arg	Val	Gly	Arg	Ala	Val	Ala	Thr	Thr	Ala	Val
			35				40				45				
Ile	Ser	Tyr	Asp	Tyr	Leu	Thr	Ser	Leu	Lys	Ser	Val	Pro	Tyr	Gly	Ser
			50				55				60				
Glu	Glu	Tyr	Leu	Gln	Leu	Arg	Ser	Lys	Ile	His	Asp	Leu	Phe	Gln	Ser
65				70				75				80			
Phe	Asp	Asp	Thr	Pro	Leu	Gly	Thr	Ala	Ser	Leu	Ala	Gln	Val	His	Lys
			85				90				95				
Ala	Val	Leu	His	Asp	Gly	Arg	Thr	Val	Ala	Val	Lys	Val	Gln	His	Pro
			100				105				110				
Lys	Val	Arg	Ala	Gln	Ser	Ser	Lys	Asp	Ile	Leu	Leu	Met	Glu	Val	Leu
			115				120				125				
Val	Leu	Ala	Val	Lys	Gln	Leu	Phe	Pro	Glu	Phe	Glu	Phe	Met	Trp	Leu
			130				135				140				
Val	Asp	Glu	Ala	Lys	Lys	Asn	Leu	Pro	Leu	Glu	Leu	Asp	Phe	Leu	Asn
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			165				170				175				
Phe	Leu	Lys	Val	Pro	Arg	Ile	His	Trp	Asp	Leu	Ser	Thr	Glu	Arg	Val
			180				185				190				
Leu	Leu	Met	Glu	Phe	Val	Asp	Gly	Gly	Gln	Val	Asn	Asp	Arg	Asp	Tyr
			195				200				205				
Met	Glu	Arg	Asn	Lys	Ile	Asp	Val	Asn	Glu	Ile	Ser	Arg	His	Leu	Gly
			210				215				220				
Lys	Met	Tyr	Ser	Glu	Met	Ile	Phe	Val	Asn	Gly	Phe	Val	His	Cys	Asp
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Pro	His	Pro	Gly	Asn	Val	Leu	Val	Arg	Lys	His	Pro	Gly	Thr	Gly	Lys
			245				250				255				
Ala	Glu	Ile	Val	Leu	Leu	Asp	His	Gly	Leu	Tyr	Gln	Met	Leu	Thr	Glu
			260				265				270				
Glu	Phe	Arg	Leu	Asn	Tyr	Cys	His	Leu	Trp	Gln	Ser	Leu	Ile	Trp	Thr
			275				280				285				
Asp	Met	Lys	Arg	Val	Lys	Glu	Tyr	Ser	Gln	Arg	Leu	Gly	Ala	Gly	Asp
			290				295				300				
Leu	Tyr	Pro	Leu	Phe	Ala	Cys	Met	Leu	Thr	Ala	Arg	Ser	Trp	Asp	Ser
305				310				315				320			
Val	Asn	Arg	Gly	Ile	Ser	Gln	Ala	Pro	Val	Thr	Ala	Thr	Glu	Asp	Leu
			325				330				335				
Glu	Ile	Arg	Asn	Asn	Ala	Ala	Asn	Tyr	Leu	Pro	Gln	Ile	Ser	His	Leu
			340				345				350				
Leu	Asn	His	Val	Pro	Arg	Gln	Met	Leu	Leu	Ile	Leu	Lys	Thr	Asn	Asp
			355				360				365				
Leu	Leu	Arg	Gly	Ile	Glu	Ala	Ala	Leu	Gly	Thr	Arg	Ala	Ser	Ala	Ser
			370				375				380				
Ser	Phe	Leu	Asn	Met	Ser	Arg	Cys	Cys	Ile	Arg	Ala	Leu	Ala	Glu	His
385				390				395				400			
Lys	Lys	Lys	Asn	Thr	Cys	Ser	Phe	Phe	Arg	Arg	Thr	Gln	Ile	Ser	Phe
			405				410				415				
Ser	Glu	Ala	Phe	Asn	Leu	Trp	Gln	Ile	Asn	Leu	His	Glu	Leu	Ile	Leu
			420				425				430				
Arg	Val	Lys	Gly	Leu	Lys	Leu	Ala	Asp	Arg	Val	Leu	Ala	Leu	Ile	Cys
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Trp	Leu	Phe	Pro	Ala	Pro	Leu									

450

455

&lt;210&gt; 6159

&lt;211&gt; 4310

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6159

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 120  
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 180  
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 300  
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 420  
 ctgtcgtttt ttgccgccc agctggagca cggaaaatct acgcggtgga ggccagcacc  
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&lt;210&gt; 6160

&lt;211&gt; 551

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6160

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				20					25					30		
Cys	Ser	Arg	Val	Gly	Lys	Gln	Ser	Phe	Ile	Ile	Thr	Leu	Gly	Cys	Asn	
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Ser	Val	Leu	Ile	Gln	Phe	Ala	Thr	Pro	Asn	Asp	Phe	Cys	Ser	Phe	Tyr	
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Ser	Glu	Arg	Thr	Glu	Glu	Ser	Ser	Ala	Val	Gln	Tyr	Phe	Gln	Phe	Tyr	
				85					90					95		
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Gly	Thr	Tyr	Gln	Arg	Ala	Ile	Leu	Gln	Asn	His	Thr	Asp	Phe	Lys	Asp	
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Lys	Ile	Val	Leu	Asp	Val	Gly	Cys	Gly	Ser	Gly	Ile	Leu	Ser	Phe	Phe	
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Tyr	Gln	Pro	Ser	Phe	His	Gly	Val	Asp	Leu	Ser	Ala	Leu	Arg	Gly	Ala	
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Ala	Lys	Glu	Gly	Asp	Leu	His	Arg	Ile	Glu	Ile	Pro	Phe	Lys	Phe	His	
305					310					315					320	
Met	Leu	His	Ser	Gly	Leu	Val	His	Gly	Leu	Ala	Phe	Trp	Phe	Asp	Val	
				325					330					335		
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			340					345					350			
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Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser				
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Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser				
	500		505	510
Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr				
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Met Gly Gly Pro Ala Ile Ser Met Ala Ser Pro Met Ser Ile Pro Thr				
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Asn Thr Met His Tyr Gly Ser				
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&lt;210&gt; 6161

&lt;211&gt; 1489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6161

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&lt;210&gt; 6162

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6162

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Glu	Arg	Lys	Glu	Asp	Gly	Gly	Asn	Gly	Lys	Lys	Arg	Ser	Thr	Leu	Leu
			20				25					30			
Arg	Lys	Gly	Thr	Glu	Pro	Gly	Val	Val	Ala	His	Ala	Cys	Asn	Pro	Xaa
			35				40					45			
Thr	Leu	Gly	Gly	Arg	Ser	Lys	Glu	Ile	Thr						
			50				55								

&lt;210&gt; 6163

&lt;211&gt; 713

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6163

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<210> 6164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

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			20					25					30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
		35					40					45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55					60				
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65					70				75					80	
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
				85					90					95	
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
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<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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			20					25					30		
Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
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Glu	Met	Leu	Ser	Lys	Lys	Gln	Glu	Phe	Leu	Glu	Lys	Lys	Ile	Glu	Gln
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Glu	Leu	Thr	Ala	Ala	Lys	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala
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Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
			85					90					95		
Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
			100					105					110		
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
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Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
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Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
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Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
			165					170						175	
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
		180						185					190		
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
	195						200					205			
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
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Glu	Asp	Asp	Asp	Met	Lys	Glu	Leu	Glu	Asn	Trp	Ala	Gly	Ser	Met	

225

230

235

&lt;210&gt; 6167

&lt;211&gt; 1220

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6167

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720  
cacctcccgc ctctgctgtc agaagcagca gctgccgccg tggaatccaa aatttcggga  
780  
gctgtgacct tttcctcatg taaaacgagt agtcttggac gatctgggca taggaaccaa  
840  
tcagaaacaa tcgcttcagc aatcaagacc attgttcac atggaggaac ccatggatac  
900  
ctctgagcct ctatctgcat taccattcac tgggcagcag tcttttgagc caagtggcaa  
960  
atttggacag tatccatcga tgcagatgaa ccacatccag gcaactgggga agtggaggac  
1020  
atagaacagc tcaatcagtg tttgatccaa cacttccatc tcattaagac aagtttgatt  
1080  
tttctttgct ttttatttca tggaatacat gagaatctct taactgttgg agtttccaag  
1140  
gaggcatacc tcatgacttc agttaatgga aagaacaaaa ctaaaatgct gtatggccaa  
1200  
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1220

&lt;210&gt; 6168

&lt;211&gt; 90

&lt;212&gt; PRT

<213> Homo sapiens

<400> 6168

Ala	Lys	Trp	Gln	Ile	Trp	Thr	Val	Ser	Ile	Asp	Ala	Asp	Glu	Pro	His
1			5					10					15		
Pro	Gly	Thr	Gly	Glu	Val	Glu	Asp	Ile	Glu	Gln	Leu	Asn	Gln	Cys	Leu
		20					25				30				
Ile	Gln	His	Phe	His	Leu	Ile	Lys	Thr	Ser	Leu	Ile	Phe	Leu	Cys	Phe
		35					40				45				
Leu	Phe	His	Gly	Ile	His	Glu	Asn	Leu	Leu	Thr	Val	Gly	Val	Ser	Lys
	50					55				60					
Glu	Ala	Tyr	Leu	Met	Thr	Ser	Val	Asn	Gly	Lys	Asn	Lys	Thr	Lys	Met
65					70				75						80
Leu	Tyr	Gly	Gln	Ser	His	Lys	Gly	Lys	Asp						
				85					90						

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120
cagtgacccc aggcttttta tggctgtgaa acacgttaaa atttcagggg aagacgtgac
180
cttttgaggt gactataact gaagattgct ttacagaagc ccaaaaaggt tttttgagtc
240
atgatgcaag aatctgggac tgagacaaaa agtaacgggt cagccatcca gaatgggtcg
300
ggcggcagca accacttact agagtgcggc ggtcttcggg aggggcggtc caacggagag
360
acgccggccg tggacatcgg ggcagctgac ctgcgccacg cccagcagca gcagcaacag
420
tggcatctca taaaccatca gccctctagg agtcccagca gttggcttaa gagactaatt
480
tcaagccctt gggagtggga agtcctgcag gtcccttggt gggagcagtt gctgagacga
540
agatgagtgg acctgtgtgt cagcctaacc cttccccatt ttgaataaaa ttattctttg
600
gagaaatggt tcccactgct ttcatgcaaa aataaaaatt aaacgaaaaa cagcttaagc
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720

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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

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			20					25					30						
Arg	Glu	Gly	Arg	Ser	Asn	Gly	Glu	Thr	Pro	Ala	Val	Asp	Ile	Gly	Ala				
		35				40						45							
Ala	Asp	Leu	Ala	His	Ala	Gln	Gln	Gln	Gln	Gln	Trp	His	Leu	Ile					
	50				55						60								
Asn	His	Gln	Pro	Ser	Arg	Ser	Pro	Ser	Ser	Trp	Leu	Lys	Arg	Leu	Ile				
65					70					75				80					
Ser	Ser	Pro	Trp	Glu	Leu	Glu	Val	Leu	Gln	Val	Pro	Cys	Gly	Glu	Gln				
				85				90						95					
Leu	Leu	Arg	Arg	Arg															
				100															

&lt;210&gt; 6171

&lt;211&gt; 1130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6171

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nncccgctag gagttcctag taaagtggcg ggagccgcag ctatggagcc gcaggaggag
60
agagaaacgc aggttgctgc gtggttaaaa aaaatatattg gagatcatcc tattccacag
120
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc
180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacagag
240
tcagaagcca agtatcttca agaccttctc atggagagtg tgaatttttc ccccgccaat
300
ctctctagca ctggttccag gtatctgaat gctttggttg acagtgcggt ggcccttgaa
360
acaaaggata cctcgctagc tagttttatc cctgcagtga atgatttgac ctctgatctc
420
tttcgtacca aatccaaaag tgaagaaatc aagattgaac tggaaaaact tgaaaaaaat
480
ttaactgcaa ctttagtatt agaaaaatgt ctacaagagg atgtcaagaa agcagagttg
540
catctgtcta cagaaagggc caaagttgat aatcgtcgtc agaacatgga ctttctaaaa
600
gcaaagtcag aggaattcag atttggaatc aaggctgcag aggagcaact ttcagccaga
660
ggcatggatg cttctctgtc tcatcagtcc ttagtagcac tatcagagaa actggcaaga
720
ttaagcaac agactatacc tttgaagaaa aaattggagt cctattttaga cttaatgccg
780
aatccgtctc ttgctcaagt gaaaattgaa gaagcaaagc gagaactaga tagcattgaa
840
gctgaactta caagaagagt agacatgatg gaactgtgac aaaagccaaa taaacatcct
900
tttccctaac aaagtaaatt gaataggact ttacagagtt ctttttcctc ttggcatttc
960
ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatggt
1020

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ttcttactgt gtgttgcat tttgtgccca aatacatagt tttcatatta aaaagccttt  
1080

tctcttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa

1130

<210> 6172

<211> 292

<212> PRT

<213> Homo sapiens

<400> 6172

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Pro	Gln	Glu	Glu	Arg	Glu	Thr	Gln	Val	Ala	Ala	Trp	Leu	Lys	Lys	Ile
			20					25					30		
Phe	Gly	Asp	His	Pro	Ile	Pro	Gln	Tyr	Glu	Val	Asn	Pro	Arg	Thr	Thr
		35					40					45			
Glu	Ile	Leu	His	His	Leu	Ser	Glu	Arg	Asn	Arg	Val	Arg	Asp	Arg	Asp
	50					55					60				
Val	Tyr	Leu	Val	Ile	Glu	Asp	Leu	Lys	Gln	Lys	Ala	Ser	Glu	Tyr	Glu
65					70					75				80	
Ser	Glu	Ala	Lys	Tyr	Leu	Gln	Asp	Leu	Leu	Met	Glu	Ser	Val	Asn	Phe
			85						90					95	
Ser	Pro	Ala	Asn	Leu	Ser	Ser	Thr	Gly	Ser	Arg	Tyr	Leu	Asn	Ala	Leu
			100					105					110		
Val	Asp	Ser	Ala	Val	Ala	Leu	Glu	Thr	Lys	Asp	Thr	Ser	Leu	Ala	Ser
		115					120					125			
Phe	Ile	Pro	Ala	Val	Asn	Asp	Leu	Thr	Ser	Asp	Leu	Phe	Arg	Thr	Lys
	130					135					140				
Ser	Lys	Ser	Glu	Glu	Ile	Lys	Ile	Glu	Leu	Glu	Lys	Leu	Glu	Lys	Asn
145					150					155				160	
Leu	Thr	Ala	Thr	Leu	Val	Leu	Glu	Lys	Cys	Leu	Gln	Glu	Asp	Val	Lys
			165					170					175		
Lys	Ala	Glu	Leu	His	Leu	Ser	Thr	Glu	Arg	Ala	Lys	Val	Asp	Asn	Arg
		180						185				190			
Arg	Gln	Asn	Met	Asp	Phe	Leu	Lys	Ala	Lys	Ser	Glu	Glu	Phe	Arg	Phe
	195						200					205			
Gly	Ile	Lys	Ala	Ala	Glu	Glu	Gln	Leu	Ser	Ala	Arg	Gly	Met	Asp	Ala
	210					215					220				
Ser	Leu	Ser	His	Gln	Ser	Leu	Val	Ala	Leu	Ser	Glu	Lys	Leu	Ala	Arg
225					230				235					240	
Leu	Lys	Gln	Gln	Thr	Ile	Pro	Leu	Lys	Lys	Lys	Leu	Glu	Ser	Tyr	Leu
			245					250					255		
Asp	Leu	Met	Pro	Asn	Pro	Ser	Leu	Ala	Gln	Val	Lys	Ile	Glu	Glu	Ala
		260					265					270			
Lys	Arg	Glu	Leu	Asp	Ser	Ile	Glu	Ala	Glu	Leu	Thr	Arg	Arg	Val	Asp
	275						280					285			
Met	Met	Glu	Leu												
	290														

<210> 6173

<211> 1483

<212> DNA

<213> Homo sapiens

&lt;400&gt; 6173

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120  
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc  
180  
aaggttttta tcaccaagca gggctatgcc ttgttggttt cagatcttca acagggtgtg  
240  
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc  
300  
actgctcctc ctgcagcttt cctctgtcat ttggataatc tccttcgccc attgttgaag  
360  
gacgctgctc accctagcga agctacctc tcctgtgatt gtgtggcaga tgcactgatt  
420  
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480  
gctagtccct ccctgggtctc ccaacatttg attcgtcctc tgatgggcat gagtctggca  
540  
ttacagtgcc aagtgaggga gctagcaacg ttacttcata tgaaagacct agagatccaa  
600  
gactaccagg agagtggggc tacgctgatt cgagatcgat tgaagacaga accatttgaa  
660  
gaaaattcct tcttggaaaca atttatgata gagaaactgc cagaggcatg cagcattggt  
720  
gatggaaagc cctttgtcat gaatctgcag gatctgtata tggcagtcac cacacaagag  
780  
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840  
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900  
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960  
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gctgctgagg atggacttgg agaatagctt ccaagcttca ccttgaaaga agcttacatg  
1080  
gcagcaatat ttctaaaata gtgatacagt cagaggcctc ctgtaagggc gagagaactg  
1140  
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1200  
ctgagaatcc cgtgctctcc tctcttttgg tggaggttct gtaggttcag gtttctacca  
1260  
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1320  
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1380  
ctcttttgca tggaataaaa agcactcaca gtccctgctt ttgggattaa aaaacaaaaa  
1440  
gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa cctcatgccg aat  
1483

&lt;210&gt; 6174

<211> 299  
 <212> PRT  
 <213> Homo sapiens

<400> 6174

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Gln Leu Ala Glu Asn Ser Leu Leu Ala Lys Val Phe Ile Thr Lys Gln
      20           25           30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35           40           45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50           55           60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
65           70           75           80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85           90           95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
      275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
      290          295

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<210> 6175  
 <211> 349  
 <212> DNA  
 <213> Homo sapiens

<400> 6175

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120

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aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaagggtgaa  
 180  
 acaaatgact ttgagttggt gaagaaccag ctggttagatc cagacataaa gagattgcct  
 240  
 tggttgaata gaagtcaaac agtagtgga gagtatttgg cttttcttgg taatcttgta  
 300  
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 349

<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

Met	Arg	Ala	Leu	Glu	Asn	Asp	Phe	Phe	Asn	Ser	Pro	Pro	Arg	Lys	Thr
1				5					10					15	
Val	Gln	Phe	Gly	Gly	Thr	Val	Thr	Glu	Val	Leu	Leu	Lys	Tyr	Lys	Lys
			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro
		35					40				45				
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55					60				
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
65					70					75					80
Leu	Arg	Pro	Cys	Leu	Ser	Met	Ile	Ala	Ser						
			85						90						

<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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 120  
 ttctagcttt ctgtctctat gggtagctca gtggagtcac tgggcgaatg ggccatgctg  
 180  
 ttgcccagtg gaggttcca ggtgaaactc tatgacattg agcaacagca gataaggaac  
 240  
 gccctggaac acatcagaaa ggagatgaag ttgctggagc aggcagggtc tctgaaaggc  
 300  
 tccttgagtg tggaagagca gctgtcactc atcagtgggt gtcccaatat ccaagaagca  
 360  
 gtagagggtg ccatgcacat tcaggaatgt gttccagaag atctagaact gaagaagaag  
 420  
 atttttgctc agttagattc catcattgat gatcgagtga tcttaagcag ttccacttct  
 480  
 tgtctcatgc cttccaagtt gtttgcctggc ttgggtccatg tgaagcaatg catcgtgggt  
 540  
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 600

gccctacga cagtggacag aacccacgcc ctgatgaaga agattgganc agtgcccat  
 660  
 gcgagtcag aaggaggtgg ccggcttcgt tctgaaccgc ctgcaatatg caatcatcag  
 720  
 cgaggcctgg cggctagtgg aggaaggaat ncgtgtctcc tagtgacctg gnaccttgtc  
 780  
 atgtcagaag ggttgggcat gcggtatgca ttcattggac ccctggaaac catgcatctc  
 840  
 aatgcagaag gtatgttaag ctactgcgac agatacagcg aaggcataaa acatgtccta  
 900  
 cagacttttg gacccattcc agagttttcc agggccactg ctgagaaggt taaccaggac  
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 aatgcagctt ccaactcctc cattggaggg cctatttggg aacactgcaa gcccttaatc  
 1140  
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 1200  
 cctgagtggg gtgggtgcagg ccggtagtct gcccgtcact ttggatcata gccctgggccc  
 1260  
 tggcggcaca gcagcacttg cgttctcggg gctgtcgatt tcctgccacc tgggcagata  
 1320  
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 1380  
 gtgattgtag tttcatgtta atatgtggca aaatattttt gtaattattt tctaaccct  
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 1536

&lt;210&gt; 6178

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6178

Met	Gly	Thr	Ser	Val	Glu	Ser	Leu	Gly	Glu	Trp	Ala	Met	Leu	Phe	Ala
1				5					10					15	
Ser	Gly	Gly	Phe	Gln	Val	Lys	Leu	Tyr	Asp	Ile	Glu	Gln	Gln	Gln	Ile
			20					25					30		
Arg	Asn	Ala	Leu	Glu	Asn	Ile	Arg	Lys	Glu	Met	Lys	Leu	Leu	Glu	Gln
			35				40						45		
Ala	Gly	Ser	Leu	Lys	Gly	Ser	Leu	Ser	Val	Glu	Glu	Gln	Leu	Ser	Leu
			50			55					60				
Ile	Ser	Gly	Cys	Pro	Asn	Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His
65					70				75					80	
Ile	Gln	Glu	Cys	Val	Pro	Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe
			85				90							95	
Ala	Gln	Leu	Asp	Ser	Ile	Ile	Asp	Asp	Arg	Val	Ile	Leu	Ser	Ser	Ser
			100				105						110		
Thr	Ser	Cys	Leu	Met	Pro	Ser	Lys	Leu	Phe	Ala	Gly	Leu	Val	His	Val

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<210> 6179
<211> 2940
<212> DNA
<213> Homo sapiens
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120
aagccatata ggctgtgaag gtccagtcac tccaaatgaa gagatgcctg gacaaaaaca
180
agcttatgga tgctctaaaa catgcttcta atatgcttgg tgaactccgg acttctatgt
240
tatcaccaaa gagttactat gaactttata tggccatttc tgatgaactg cactacttgg
300
aggntctacc tgacagatga gtttgctaaa ggaaggaaaag tggcagatct ctacgaactt
360
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420
tatgtcaagt catttcctca gtccaggaag gatattttga aagatttggt agaaatgtgc
480
cgtgggtgtgc aacatccctt gaggggtctg tttcttcgaa attaccttct tcagtgtacc
540
agaaaatatct tacctgatga aggagagcca acagatgaag aaacaactgg tgacatcagt
600
gattccatgg attttgtact gctcaacttt gcagaaatga acaagctctg ggtgcgaatg
660

```

cagcatcagg gacatagccg agatagagaa aaaagagaac gagaaagaca agaactgaga  
720  
attttagtgg gaacaaattht ggtgcgcctc agtnncagtt ggaggtgtaa atgtggaacg  
780  
ttacaacaga ttgttttgac tggcatattg gagcaagttg taaactgtag ggatgctttg  
840  
gctcaagaat atctcatgga gtgtattatt cagggttttcc ctgatgaatt tcacctccag  
900  
actttgaatc cttttcttcg ggctgtgct gagttacacc agaatgtaaa tgtgaagaac  
960  
ataatcattg ctttaattga tagattagct ttatttgctc accgtgaaga tggacctgga  
1020  
atcccagcgg atattaaact ttttgatata ttttcacagc aggtggctac agtgatacag  
1080  
tctagacaag acatgccttc agaggatgtt gtatctttac aagtctctct gattaatctt  
1140  
gccatgaaat gttaccctga tegtgtggac tatgttgata aagttctaga aacaacagtg  
1200  
gagatattca ataagctcaa ccttgaacat attgctacca gtagtgagcgt ttcaaaggaa  
1260  
ctcaccagac ttttgaaaat accagttgac acttacaaca atattttaac agtcttgaaa  
1320  
ttaaacaatt ttcacccact ctttgagtag tttgactacg agtccagaaa gagcatgagt  
1380  
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1440  
gattccataa tgaatttggt atccacgttg attcaagatc agccagatca acctgtagaa  
1500  
gacctgatc cagaagattt tgctgatgag cagagccttg tgggccgctt cattcatctg  
1560  
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&lt;210&gt; 6180

&lt;211&gt; 751

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6180

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Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
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Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn



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Glu	Leu	Thr	Arg	Leu	Leu	Lys	Ile	Pro	Val	Asp	Thr	Tyr	Asn	Asn	Ile	
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Ile	Leu	Asn	Thr	Ala	Arg	Lys	His	Phe	Gly	Ala	Gly	Gly	Asn	Gln	Arg	
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Ala	Arg	Arg	Phe	Phe	His	Leu	Pro	Xaa	Gln	Thr	Ile	Ser	Ala	Leu	Ile	
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Lys	Ala	Glu	Leu	Ala	Glu	Leu	Pro	Leu	Arg	Leu	Phe	Leu	Gln	Gly	Ala	
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Leu	Ala	Ala	Gly	Glu	Ile	Gly	Phe	Glu	Asn	His	Glu	Thr	Val	Ala	Tyr	
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Lys Ala Leu Lys Ile Ala Asn Gln Cys Met Asp Pro Ser Leu Gln Val
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Gln Leu Phe Ile Glu Ile Leu Asn Arg Tyr Ile Tyr Phe Tyr Glu Lys
          675          680          685
Glu Asn Asp Ala Val Thr Ile Gln Val Leu Asn Gln Leu Ile Gln Lys
          690          695          700
Ile Arg Glu Asp Leu Pro Asn Leu Glu Ser Ser Glu Glu Thr Glu Gln
705          710          715          720
Ile Asn Lys His Phe His Asn Thr Leu Glu His Leu Arg'Leu Arg Arg
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Glu Ser Pro Glu Ser Glu Gly Pro Ile Tyr Glu Gly Leu Ile Leu
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 <212> DNA  
 <213> Homo sapiens

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 Glu Val Phe Phe Leu Pro Asp Leu Pro Thr Thr Pro Tyr Phe Ser Arg  
           35                  40                  45  
 Asp Ala Gln Lys His Asp Val Glu Val Leu Glu Arg Asn Phe Gln Thr  
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 Ile Leu Cys Glu Phe Glu Thr Leu Tyr Lys Ala Phe Ser Asn Cys Ser  
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 Leu Pro Gln Gly Trp Lys Met Asn Ser Thr Pro Ser Gly Glu Trp Phe  
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 Thr Phe Tyr Leu Val Asn Gln Gly Val Cys Val Pro Arg Asn Cys Arg  
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 Lys Cys Pro Arg Thr Tyr Arg Leu Leu Gly Ser Leu Arg Thr Cys Ile  
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 Gly Asn Asn Val Phe Gly Asn Ala Cys Ile Ser Val Leu Ser Pro Gly  
   130                  135                  140  
 Thr Val Ile Thr Glu His Tyr Gly Pro Thr Asn Ile Arg Ile Arg Cys  
 145                  150                  155                  160  
 His Leu Gly Leu Lys Thr Pro Asn Gly Cys Glu Leu Val Val Gly Gly  
           165                  170                  175  
 Glu Pro Gln Cys Trp Ala Glu Gly Arg Cys Leu Leu Phe Asp Asp Ser  
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 Phe Leu His Ala Ala Phe His Glu Gly Ser Ala Glu Asp Gly Pro Arg  
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 Val Val Phe Met Val Asp Leu Trp His Pro Asn Val Ala Ala Ala Glu  
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 <212> PRT  
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 Ala Arg Gly Gly Lys Ala Glu Asp Lys Glu Trp Met Pro Val Thr Lys  
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 Tyr Leu Phe Ser Leu Pro Ile Lys Glu Ser Glu Ile Ile Asp Phe Phe  
 100 105 110  
 Leu Gly Ala Ser Leu Lys Asp Glu Val Leu Lys Ile Met Pro Val Gln  
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 Lys Gln Thr Arg Ala Gly Gln Arg Thr Arg Phe Lys Ala Phe Val Ala  
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 Ile Gly Asp Tyr Asn Gly His Val Gly Leu Gly Val Lys Cys Ser Lys

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 Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro  
    180                                      185                                      190  
 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val  
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 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val  
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<212> DNA

<213> Homo sapiens

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 35 40 45  
 Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln  
 50 55 60  
 Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser  
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 Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro  
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 <212> DNA  
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&lt;210&gt; 6188

&lt;211&gt; 227

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6188

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Glu	Ala	Leu	Leu	Asp	Glu	Asp	Thr	Leu	Phe	Cys	Gln	Gly	Leu	Glu	Val
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Phe	Tyr	Pro	Glu	Leu	Gly	Asn	Ile	Gly	Cys	Lys	Val	Val	Pro	Asp	Cys
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Asn	Asn	Tyr	Arg	Gln	Lys	Ile	Thr	Ser	Trp	Met	Glu	Pro	Ile	Val	Lys
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Phe	Pro	Gly	Ala	Val	Tyr	Gly	Ala	Thr	Tyr	Ile	Leu	Val	Met	Val	Asp
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Pro	Asp	Ala	Pro	Ser	Arg	Ala	Glu	Pro	Arg	Gln	Arg	Phe	Trp	Arg	His
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Trp	Leu	Val	Thr	Asp	Ile	Lys	Gly	Ala	Asp	Leu	Lys	Lys	Gly	Lys	Ile
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Gln	Gly	Gln	Glu	Leu	Ser	Ala	Tyr	Gln	Ala	Pro	Ser	Pro	Pro	Ala	His
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Ser	Gly	Phe	His	Arg	Tyr	Gln	Phe	Phe	Val	Tyr	Leu	Gln	Glu	Gly	Lys
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<211> 2761
<212> DNA
<213> Homo sapiens
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240
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420
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1140

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2761

&lt;210&gt; 6190

&lt;211&gt; 576

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6190

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 50          55          60
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Gln Asn Pro Pro Gly Ala Pro Pro Asn Val Leu Trp Gln Thr Pro Leu
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Pro Pro Ala Arg Gln Ser Pro Pro Ala Arg Gln Thr Pro Pro Ala Trp
 115         120         125
Gln Thr Gln Asn Pro Val Ala Trp Gln Asn Pro Val Ile Trp Pro Asn
 130         135         140
Pro Val Ile Trp Gln Asn Pro Val Ile Trp Pro Asn Pro Ile Val Trp
 145         150         155         160
Pro Gly Pro Val Val Trp Pro Asn Pro Leu Ala Trp Gln Asn Pro Pro
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Pro Pro Asp Trp Gln Gly Pro Pro Asp Trp Pro Leu Pro Pro Asp Trp
 195         200         205
Pro Leu Pro Pro Asp Trp Pro Leu Pro Thr Asp Trp Pro Leu Pro Pro
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Asp Trp Ile Pro Ala Asp Trp Pro Ile Pro Pro Asp Trp Gln Asn Leu
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 290         295         300
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Lys Phe Gly Ile Gln Leu Lys Glu Ile Asp Lys Glu Glu His Leu Tyr
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&lt;210&gt; 6191

&lt;211&gt; 3021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6191

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 <212> PRT  
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 Gly Ser Ala Asn Val Val Thr Glu Ala Leu Gln Arg Phe Thr Arg Ala  
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Arg	Tyr	Pro	Asn	Leu	Asn	Leu	Arg	Ala	Val	Thr	Pro	Asn	Gln	Val
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Lys	Thr	Asp	Thr	Gly	Met	Pro	Ala	Thr	Gly	Ser	Ala	Gly	Thr	Gln
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Glu	Leu	Leu	Arg	Trp	Cys	Gln	Glu	Gln	Thr	Ala	Gly	Tyr	Pro	Gly
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His	Val	Ser	Asp	Leu	Ser	Ser	Ser	Trp	Ala	Asp	Gly	Leu	Ala	Leu
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Pro	Ser	Gln	His	Gln	Glu	Ala	Gly	Ala	Gly	Asp	Leu	Cys	Ala	Leu
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Gly	Glu	His	Leu	Tyr	Val	Leu	Glu	Arg	Leu	Cys	Val	Asn	Gly	His
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Pro	Gly	Gly	Tyr	Glu	Gln	His	Pro	Gly	Asp	Gly	His	Phe	Tyr	Cys
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Gln	His	Leu	Pro	Gln	Thr	Asp	His	Lys	Ala	Glu	Gly	Ser	Asp	Arg
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Pro	Glu	Ser	Pro	Glu	Leu	Pro	Thr	Pro	Ser	Glu	Asn	Ser	Met	Pro
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Gly	Leu	Ser	Thr	Pro	Thr	Ala	Ser	Gln	Glu	Gly	Ala	Gly	Pro	Val
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Asp	Pro	Ser	Gln	Pro	Thr	Arg	Arg	Gln	Ile	Arg	Leu	Ser	Ser	Pro
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Arg	Gln	Arg	Leu	Ser	Ser	Leu	Asn	Leu	Thr	Pro	Asp	Pro	Glu	Met
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<213> Homo sapiens
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&lt;210&gt; 6194

&lt;211&gt; 621

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6194

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Gln	Leu	Ile	Leu	Asn	His	Leu	Thr	Leu	Pro	Asp	Leu	Cys	Arg	Leu	Ala
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Phe	Leu	Lys	Val	Cys	Gly	Ser	Glu	Leu	Val	Arg	Leu	Glu	Leu	Ser	Cys
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Ser	His	Phe	Leu	Asn	Glu	Thr	Cys	Leu	Glu	Val	Ile	Ser	Glu	Met	Cys
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Pro	Asn	Leu	Gln	Ala	Leu	Asn	Leu	Ser	Ser	Cys	Asp	Lys	Leu	Pro	Pro
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Gln	Ala	Phe	Asn	His	Ile	Ala	Lys	Leu	Cys	Ser	Leu	Lys	Arg	Leu	Val
			420					425					430		
Leu	Tyr	Arg	Thr	Lys	Val	Glu	Gln	Thr	Ala	Leu	Leu	Ser	Ile	Leu	Asn
		435					440					445			
Phe	Cys	Ser	Glu	Leu	Gln	His	Leu	Ser	Leu	Gly	Ser	Cys	Val	Met	Ile
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Glu	Asp	Tyr	Asp	Val	Ile	Ala	Ser	Met	Ile	Gly	Ala	Lys	Cys	Lys	Lys
465					470					475					480
Leu	Arg	Thr	Leu	Asp	Leu	Trp	Arg	Cys	Lys	Asn	Ile	Thr	Glu	Asn	Gly
				485					490					495	
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6197

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&lt;210&gt; 6198

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6198

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Ser	Ser	Gln	His	His	Gly	Leu	Asn	Thr	His	Trp	Ala	Pro	Thr	Leu	Gly
		35				40				45					
Pro	Gly	Trp	Gly	Met	Trp	Gly	Gln	Glu	Ala	Ala	Gln	Ser	Gly	Arg	Gln
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Arg	Glu	Lys	Cys	Val	Gln	Arg	Ala	Pro	Ile	Ser	Gly	Cys	Asn	Val	Val
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				85					90					95	
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Val	Ala	Thr	Ile	Leu	Glu	Leu	Ser	Ala	Leu	Ile	Val				
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&lt;210&gt; 6199

&lt;211&gt; 1777

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6199

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&lt;210&gt; 6200

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6200

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Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
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Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
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Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
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Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
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Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
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Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
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155

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gccg  
604

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<212> PRT  
<213> Homo sapiens

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35 40 45  
Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro  
50 55 60  
Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His  
65 70 75 80  
Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg  
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100 105 110  
Gly Asp His Ala Gly Ala Gln Gly Glu Arg Gln Asp

115

120

&lt;210&gt; 6203

&lt;211&gt; 3462

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6203

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&lt;210&gt; 6204

&lt;211&gt; 486

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6204

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			165						170					175	
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Lys	Ile	Glu	Lys	Cys	Lys	Gln	Asp	Val	Leu	Lys	Thr	Lys	Glu	Lys	Tyr
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<210> 6205
<211> 926
<212> DNA
<213> Homo sapiens
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<211> 92

<212> PRT

<213> Homo sapiens

<400> 6206

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			20					25					30		
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
		35					40					45			
Thr	Ser	Ala	Lys	Leu	Asn	His	Gln	Val	Ser	Glu	Val	Phe	Asn	Thr	Val
	50					55					60				
Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
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<211> 1384

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 6208

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6208

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			20					25					30		
Ser	Ala	Gly	Leu	Ser	Leu	Val	Gly	Leu	Leu	Thr	Leu	Gly	Ala	Val	Leu
		35					40					45			
Ser	Ala	Ala	Ala	Thr	Val	Arg	Glu	Ala	Gln	Gly	Leu	Met	Ala	Gly	Gly
		50				55					60				
Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
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<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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		20						25					30		
Ser	Pro	Ser	Leu	Arg	Gly	Thr	His	Leu	Leu	Phe	Leu	Pro	Gln	Ala	Asp
		35					40					45			
Val	Val	Asp	Glu	Ala	Ile	Asp	Ser	Leu	Ala	Arg	Thr	Lys	Gly	Val	Met
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Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
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Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
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		100						105					110		
Ala	Arg	Glu	Arg	Gln	Arg	Trp	Val	Phe	Arg	Phe	His	Ala	Tyr	Val	Trp
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<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6218

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&lt;211&gt; 2495

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6219

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&lt;210&gt; 6222

&lt;211&gt; 330

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6222

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			20					25					30		
Lys	Leu	His	Lys	Cys	Lys	Glu	Phe	Val	Asp	Ser	Cys	Arg	Leu	Thr	Phe
		35					40					45			
Pro	Thr	Ser	Gly	Asp	Glu	Tyr	Ser	Arg	Gly	Phe	Leu	Gln	Asn	Leu	Asn
	50				55					60					
Leu	Ile	Gln	Asp	Gln	Asn	Ala	Gln	Thr	Arg	Trp	Lys	Gln	Gly	Arg	Tyr
65				70					75					80	
Asp	Glu	Asp	Gly	Lys	Pro	Phe	Asn	Gln	Arg	Ser	Leu	Leu	Leu	Gly	His
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<212> DNA
<213> Homo sapiens
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5405

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 <213> Homo sapiens

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 Ala Glu Gly His Val Gly Gln Gly Ala Pro Gly Leu Met Gly Asn Met  
 35 40 45  
 Asn Pro Glu Gly Gly Val Asn His Glu Asn Gly Met Asn Arg Asp Gly  
 50 55 60  
 Gly Met Ile Pro Glu Gly Gly Gly Gly Asn Gln Glu Pro Arg Gln Gln  
 65 70 75 80  
 Pro Gln Pro Pro Pro Glu Glu Pro Ala Gln Ala Ala Met Glu Gly Pro  
 85 90 95  
 Gln Pro Glu Asn Met Gln Pro Arg Thr Arg Arg Thr Lys Phe Thr Leu  
 100 105 110  
 Leu Gln Val Glu Glu Leu Glu Ser Val Phe Arg His Thr Gln Tyr Pro  
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 Asp Lys Val Arg Val Ser Thr Leu Glu Lys Ala Ile  
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<210> 6225  
 <211> 3851  
 <212> DNA  
 <213> Homo sapiens

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<210> 6226

<211> 246

<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly	35	40	45	
Lys	Gln	Ser	Val	Asn	Arg	Gly	Phe	Thr	Lys	Asp	Lys	Thr	Leu	Ser	Ser	50	55	60	
Ile	Phe	Asn	Ile	Glu	Met	Val	Lys	Glu	Lys	Thr	Ala	Glu	Glu	Ile	Lys	65	70	75	80
Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val	85	90	95	
Ile	Pro	Ala	Glu	Lys	Phe	Asp	Leu	Ile	Trp	Asn	Arg	Ala	Gln	Ser	Cys	100	105	110	
Pro	Thr	Phe	Leu	Cys	Ala	Leu	Pro	Arg	Arg	Glu	Gly	Tyr	Glu	Phe	Phe	115	120	125	
Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn	130	135	140	
Ile	Gln	Thr	Arg	Gly	Glu	Ala	Ala	Ala	Ser	Gln	Leu	Ile	Leu	Tyr	His	145	150	155	160
Tyr	Pro	Glu	Leu	Lys	Glu	Glu	Lys	Gly	Ile	Val	Leu	Met	Thr	Ala	Glu	165	170	175	
Met	Asp	Ser	Thr	Phe	Leu	Asn	Val	Ala	Glu	Ala	Gln	Cys	Ile	Ala	Asn	180	185	190	
Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu	195	200	205	
Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val	210	215	220	
Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala	225	230	235	240
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245

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 <212> DNA  
 <213> Homo sapiens

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 830

<210> 6228  
 <211> 271  
 <212> PRT  
 <213> Homo sapiens

<400> 6228  
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 Ile Pro Ser Pro Gly Arg Val Ala Ala Glu Trp Glu Val Gln Asn Arg  
 35 40 45  
 Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn  
 50 55 60  
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<211> 3105
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 6230

&lt;211&gt; 944

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6230

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			20					25					30		
Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys	Leu
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Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe	Val
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Val	Gly	Thr	Glu	Lys	Gly	Arg	Met	Phe	Leu	Asn	Ala	Arg	Lys	Glu	Leu
65				70					75					80	
Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
			85						90					95	
Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Gly	Arg
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Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
		115				120						125			
Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala	Leu
	130					135					140				
Gly	Arg	Ala	Ser	Val	Val	Pro	Leu	Pro	Tyr	Glu	Arg	Leu	Leu	Arg	Glu
145					150				155					160	
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5414

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<210> 6232

<211> 138

<212> PRT

<213> Homo sapiens

<400> 6232

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			20					25					30		
Lys	Lys	Ser	Met	Leu	Gly	Gln	Lys	Ser	Gly	Pro	Ser	Gly	Leu	Leu	Thr
		35				40						45			
Trp	Arg	Arg	Lys	Arg	Gly	Pro	Lys	Pro	Pro	Val	Ala	Pro	Ile	Ser	Ile
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Trp	Asn	Gly	Thr	Thr	Pro	Arg	Gly	Glu	Pro	Pro	Asn	His	Ser	Ser	
65					70				75					80	
Lys	Lys	Gly	Thr	Lys	Lys	Trp	Ala	Leu	Asp	Phe	Ser	Thr	Pro	Glu	Thr
			85						90					95	
Gln	Phe	Pro	Pro	Pro	Gly	Arg	Pro	Phe	Leu	Gly	Ile	Pro	Thr	Trp	Asp
			100					105					110		
Pro	Thr	Trp	Ala	Tyr	Ser	Gly	Pro	Tyr	Leu	Phe	Leu	Val	Gly	Ile	Gly
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<210> 6233

<211> 894

<212> DNA

<213> Homo sapiens

<400> 6233

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&lt;210&gt; 6234

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6234

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			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
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His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
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Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65			70					75						80	
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
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Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
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Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115				120						125			
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Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
			180					185					190		
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
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Trp	Val	Lys	Asp	Glu	Asn	Val	Glu	Phe	Asp	Ser	Asp	Glu	Glu	Glu	Pro

210  
Pro Asp Leu Pro Leu Asp  
225 230

220

&lt;210&gt; 6235

&lt;211&gt; 3427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6235

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<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
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Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
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Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
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Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
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Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
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Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
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Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
		180						185					190		
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
	195						200					205			
Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
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Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

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Gly	Ala	Asn	Pro	Lys	Val	Arg	Pro	Asn	Pro	Ala	Arg	Phe	Leu	Gln	Asn
			260					265					270		
Cys	Arg	Ala	Pro	Gly	Gly	Phe	Met	Ser	Asn	Arg	Phe	Val	Glu	Thr	Asn
	275						280					285			
Leu	Phe	Leu	Glu	Glu	Ile	Gln	Ile	Lys	Glu	Pro	Ala	Glu	Lys	Gln	Lys
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Phe	Phe	Gln	Glu	Leu	Ser	Lys	Ser	Leu	Asp	Ala	Phe	Pro	Glu	Asp	Phe
305					310					315					320
Cys	Arg	His	Lys	Val	Leu	Pro	Gln	Leu	Leu	Thr	Ala	Phe	Glu	Phe	Gly
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Asn	Ala	Gly	Ala	Val	Val	Leu	Thr	Pro	Leu	Phe	Lys	Val	Gly	Lys	Phe
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Ile	Phe	Pro	His	Val	Val	His	Gly	Phe	Leu	Asp	Thr	Asn	Pro	Ala	Ile
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Arg	Glu	Gln	Thr	Val	Lys	Ser	Met	Leu	Leu	Leu	Ala	Pro	Lys	Leu	Asn
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Glu	Ala	Asn	Leu	Asn	Val	Glu	Leu	Met	Lys	His	Phe	Ala	Arg	Leu	Gln
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Ala	Lys	Asp	Glu	Gln	Gly	Pro	Ile	Arg	Cys	Asn	Thr	Thr	Val	Cys	Leu
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Thr	Ser	Ala	Phe	Ser	Arg	Ala	Thr	Arg	Asp	Pro	Phe	Ala	Pro	Ser	Arg
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Asn	Asp	Cys	Ala	Gln	Lys	Ile	Leu	Pro	Val	Leu	Cys	Gly	Leu	Thr	Val
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Phe	Leu	Ser	Lys	Leu	Glu	Ser	Val	Ser	Glu	Asp	Pro	Thr	Gln	Leu	Glu
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Glu	Val	Glu	Lys	Asp	Val	His	Ala	Ala	Ser	Ser	Pro	Gly	Met	Gly	Gly
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Ala	Ala	Ala	Ser	Trp	Ala	Gly	Trp	Ala	Val	Thr	Gly	Val	Ser	Ser	Leu
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Glu	Glu	Asp	Lys	Asp	Thr	Ala	Glu	Asp	Ser	Ser	Thr	Ala	Asp	Arg	Trp
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<400> 6238  
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Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met			
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Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala			
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Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly			
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His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg			
	85	90	95
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro			
	100	105	110
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys			
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Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly			
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&lt;210&gt; 6239

&lt;211&gt; 911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6239

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<210> 6240

<211> 235

<212> PRT

<213> Homo sapiens

<400> 6240

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Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
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Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
65           70           75           80
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
          85           90           95
Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
      100           105           110
Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
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Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
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<211> 1515

<212> DNA

<213> Homo sapiens

<400> 6241

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120
cgccggggccc caggaggagg gccgggggag ccgccgccgc ctgagctggc gttgctcccc
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ccaccgccgc cgccgccgcc gactcccgcg accccgacgt cctcggcgtc caacctggac
240

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&lt;210&gt; 6242

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6242

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 Ser Gln Ala Gly Ser Lys Ser Gln Ala Val Glu Lys Pro Pro Ser Glu

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Lys Pro Arg Leu Arg Arg Ser Ser Arg Arg Ala Pro Gly Gly Gly Pro
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Pro Pro Pro Thr Pro Ala Thr Pro Thr Ser Ser Ala Ser Asn Leu Asp
65                70                75                80
Leu Gly Glu Gln Arg Asp Ala Trp Glu Thr Phe Gln Lys Arg Gln Lys
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Leu Thr Ser Glu Gly Ala Ala Lys Leu Leu Leu Asp Thr Phe Glu Tyr
                100                105                110
Gln Gly Leu Val Lys His Thr Gly Gly Cys His Cys Gly Ala Val Arg
                115                120                125
Phe Glu Val Trp Ala Ser Ala Asp Leu His Ile Phe Asp Cys Asn Cys
                130                135                140
Ser Ile Cys Lys Lys Lys Gln Asn Arg His Phe Ile Val Pro Ala Ser
145                150                155                160
Arg Phe Lys Leu Leu Lys Gly Ala Glu His Ile Thr Thr Tyr Thr Phe
                165                170                175
Asn Thr His Lys Ala Gln His Thr Phe Cys Lys Arg Cys Gly Val Gln
                180                185                190
Ser Phe Tyr Thr Pro Arg Ser Asn Pro Gly Gly Phe Gly Ile Ala Pro
                195                200                205
His Cys Leu Asp Glu Gly Thr Val Arg Ser Met Val Thr Glu Glu Phe
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Asn Gly Ser Asp Trp Glu Lys Ala Met Lys Glu His Lys Thr Ile Lys
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Asn Met Ser Lys Glu
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```

&lt;210&gt; 6243

&lt;211&gt; 326

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6243

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326

```

&lt;210&gt; 6244

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6244

```

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Leu Pro Gln Val Pro Lys Pro Thr Phe Thr Ile Leu Gly Pro Val Leu
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Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu
          35           40           45
Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
          50           55           60
Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
65           70           75           80
Pro Tyr Val Leu Ser Tyr Pro Thr Ser Ser Leu Thr Leu Phe His Gln
          85           90           95
Phe Leu Ser Phe Ser Pro Trp Arg
          100

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&lt;210&gt; 6245

&lt;211&gt; 6609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6245

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960

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<210> 6246  
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<400> 6246  
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Glu	Gln	Leu	Asn	Gln	Leu	Thr	Glu	Asp	Asn	Ala	Glu	Leu	Asn	Asn	Gln
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Thr	Glu	Arg	Glu	Met	Gln	Leu	Thr	Ser	Gln	Lys	Gln	Thr	Met	Glu	Ala
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Leu	Lys	Thr	Thr	Cys	Thr	Met	Leu	Glu	Glu	Gln	Val	Met	Asp	Leu	Glu
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Pro	His	Pro	Ser	Thr	Pro	Ala	Thr	Ala	Arg	Gln	Gln	Ile	Ala	Met	Ser
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Ala	Ile	Val	Arg	Ser	Pro	Glu	His	Gln	Pro	Ser	Ala	Met	Ser	Leu	Leu



			580				585				590					
Ala	Pro	Pro	Ser	Ser	Arg	Arg	Lys	Glu	Ser	Ser	Thr	Pro	Glu	Glu	Phe	
			595				600				605					
Ser	Arg	Arg	Leu	Lys	Glu	Arg	Met	His	His	Asn	Ile	Pro	His	Arg	Phe	
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Asn	Val	Gly	Leu	Asn	Met	Arg	Ala	Thr	Lys	Cys	Ala	Val	Cys	Leu	Asp	
625					630				635				640			
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			645				650				655					
Met	Cys	His	Pro	Lys	Cys	Ser	Thr	Cys	Leu	Pro	Ala	Thr	Cys	Gly	Leu	
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Pro	Ala	Glu	Tyr	Ala	Thr	His	Phe	Thr	Glu	Ala	Phe	Cys	Arg	Asp	Lys	
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Met	Asn	Ser	Pro	Gly	Leu	Gln	Thr	Lys	Glu	Pro	Ser	Ser	Ser	Leu	His	
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Leu	Glu	Gly	Trp	Met	Lys	Val	Pro	Arg	Asn	Asn	Lys	Arg	Gly	Gln	Gln	
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Tyr	Asp	Asn	Glu	Ala	Arg	Glu	Ala	Gly	Gln	Arg	Pro	Val	Glu	Glu	Phe	
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Glu	Leu	Cys	Leu	Pro	Asp	Gly	Asp	Val	Ser	Ile	His	Gly	Ala	Val	Gly	
			755				760				765					
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Ala	Asp	Ala	Lys	Leu	Leu	Gly	Asn	Ser	Leu	Leu	Lys	Leu	Glu	Gly	Asp	
			835				840				845					
Asp	Arg	Leu	Asp	Met	Asn	Cys	Thr	Leu	Pro	Phe	Ser	Asp	Gln	Val	Val	
			850				855				860					
Leu	Val	Gly	Thr	Glu	Glu	Gly	Leu	Tyr	Ala	Leu	Asn	Val	Leu	Lys	Asn	
865					870				875				880			
Ser	Leu	Thr	His	Val	Pro	Gly	Ile	Gly	Ala	Val	Phe	Gln	Ile	Tyr	Ile	
			885				890				895					
Ile	Lys	Asp	Leu	Glu	Lys	Leu	Leu	Met	Ile	Ala	Gly	Glu	Glu	Arg	Ala	
			900				905				910					
Leu	Cys	Leu	Val	Asp	Val	Lys	Lys	Val	Lys	Gln	Ser	Leu	Ala	Gln	Ser	
			915				920				925					
His	Leu	Pro	Ala	Gln	Pro	Asp	Ile	Ser	Pro	Asn	Ile	Phe	Glu	Ala	Val	
			930				935				940					
Lys	Gly	Cys	His	Leu	Phe	Gly	Ala	Gly	Lys	Ile	Glu	Asn	Gly	Leu	Cys	
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Asn	Leu	Ser	Lys	Tyr	Cys	Ile	Arg	Lys	Glu	Ile	Glu	Thr	Ser	Glu	Pro	
			980				985				990					
Cys	Ser	Cys	Ile	His	Phe	Thr	Asn	Tyr	Ser	Ile	Leu	Ile	Gly	Thr	Asn	
			995				1000				1005					
Lys	Phe	Tyr	Glu	Ile	Asp	Met	Lys	Gln	Tyr	Thr	Leu	Glu	Glu	Phe	Leu	

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Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg
      1045              1050              1055
Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser
      1060              1065              1070
Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro
      1075              1080              1085
Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn
      1090              1095              1100
Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro
1105              1110              1115              1120
Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala
      1125              1130              1135
Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu
      1140              1145              1150
Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu
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His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly
      1170              1175              1180
Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro
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Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His
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Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly
      1220              1225              1230
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      1235              1240              1245
Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg
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Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val
1265              1270              1275              1280
Trp Asp Gln Ser Ser Val
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&lt;210&gt; 6247

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6247

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120
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180
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240
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360

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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
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 50 55 60  
 Ile Leu Phe Ile Cys Ala Arg Gly Arg Arg Gly Asn Pro Cys Leu Ser  
 65 70 75 80  
 Leu Ser Gln Arg Arg Val Glu Ala Ala His Val Leu Gly His Arg Glu  
 85 90 95  
 Trp Ser Glu Lys Arg Gln Lys Lys Asp Ile Pro Trp Ser Trp Arg Gln  
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<210> 6249  
 <211> 1217  
 <212> DNA  
 <213> Homo sapiens

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 300  
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 420  
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&lt;210&gt; 6250

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6250

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			20					25					30		
Val	Ile	Ala	Thr	Asp	Ile	Asn	Glu	Ser	Lys	Leu	Gln	Glu	Leu	Glu	Lys
			35				40					45			
Tyr	Pro	Gly	Ile	Gln	Thr	Arg	Val	Leu	Asp	Val	Thr	Lys	Lys	Lys	Gln
			50				55				60				
Ile	Asp	Gln	Phe	Ala	Asn	Glu	Val	Glu	Arg	Leu	Asp	Val	Leu	Phe	Asn
65					70					75				80	
Val	Ala	Gly	Phe	Val	His	His	Gly	Thr	Val	Leu	Asp	Cys	Glu	Glu	Lys
				85				90					95		
Asp	Trp	Asp	Phe	Ser	Met	Asn	Leu	Asn	Val	Arg	Ser	Met	Tyr	Leu	Met
			100					105					110		
Ile	Lys	Ala	Phe	Leu	Pro	Lys	Met	Leu	Ala	Gln	Lys	Ser	Gly	Asn	Ile
			115				120					125			
Ile	Asn	Met	Ser	Ser	Val	Ala	Ser	Ser	Val	Lys	Gly	Val	Val	Asn	Arg
			130				135				140				
Cys	Val	Tyr	Ser	Thr	Thr	Lys	Ala	Ala	Val	Ile	Gly	Leu	Thr	Lys	Ser
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Val	Ala	Ala	Asp	Phe	Ile	Gln	Gln	Gly	Ile	Arg	Cys	Asn	Cys	Val	Cys

<400>	6251				
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180					
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240					
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300					
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360					
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420					
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480					
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540					
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1080					

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&lt;210&gt; 6252

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6252

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Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
		20						25					30		
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
	35					40						45			
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
	50					55					60				
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65					70				75					80	
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
			85					90						95	
Pro	Thr	Ile	Pro												
			100												

&lt;210&gt; 6253

&lt;211&gt; 1953

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6253

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 1920  
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 1953

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 <211> 216  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe  
 50 55 60  
 Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr  
 65 70 75 80  
 Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His  
 85 90 95  
 Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro  
 100 105 110  
 Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp  
 115 120 125  
 Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe  
 130 135 140  
 Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala  
 145 150 155 160  
 His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Glu  
 165 170 175  
 Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu  
 180 185 190  
 Phe Asn Leu Ile Asp Arg Arg Glu Leu Ala Pro Leu Gln Glu Leu Ile  
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 Glu Lys Leu Gly Ser Lys Asp Arg  
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 <212> DNA  
 <213> Homo sapiens

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 480  
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 622

<210> 6256  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 6256  
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 35 40 45  
 Asn Ile Met Gly Gly Lys Glu Gln Asn Ser Pro Ile Tyr Ile Ser Arg  
 50 55 60  
 Val Ile Pro Gly Gly Val Ala Asp Arg His Gly Gly Leu Lys Arg Gly  
 65 70 75 80  
 Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu Gly Glu Gln His  
 85 90 95  
 Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Gln Gly Ser Val Lys Leu  
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 Val Val Arg Tyr Thr Pro Arg Val Leu Glu Glu Met Glu Ala Arg Phe  
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<210> 6264

<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

Met	Ala	Ser	Asn	Met	Asp	Arg	Glu	Met	Ile	Leu	Ala	Asp	Phe	Gln	Ala
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Cys	Thr	Gly	Ile	Glu	Asn	Ile	Asp	Glu	Ala	Ile	Thr	Leu	Leu	Glu	Gln
			20					25					30		
Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu
		35					40					45			
Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro
	50					55					60				
Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser
65					70					75				80	
Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg
				85					90					95	
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val
			100					105					110		
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile
		115					120					125			
Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly
	130					135					140				
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His
145					150					155				160	
Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro
			165						170					175	
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln
			180					185					190		
Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn
		195					200					205			
Leu	Asn	Phe	Ser	Gly	Ser	Ser	Thr	Ile	Gln	Glu	Val	Lys	Arg	Asn	Val
	210					215					220				
Tyr	Asp	Leu	Thr	Ser	Ile	Pro	Val	Arg	His	Gln	Leu	Trp	Glu	Gly	Trp
225					230					235				240	
Pro	Thr	Ser	Ala	Thr	Asp	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu
			245						250					255	
Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala
			260					265					270		
Gln	Thr	Arg	Glu	Gln	Ser	Glu	Glu	Gln	Ile	Thr	Asp	Val	His	Met	Val

		275					280				285				
Ser	Asp	Ser	Asp	Gly	Asp	Asp	Phe	Glu	Asp	Ala	Thr	Glu	Phe	Gly	Val
	290					295					300				
Asp	Asp	Gly	Glu	Val	Phe	Gly	Met	Ala	Ser	Ser	Ala	Leu	Arg	Lys	Ser
305				310						315					320
Pro	Met	Ile	Cys	Phe	Leu	Val	Pro	Glu	Asn	Ala	Glu	Asn	Glu	Gly	Asp
			325						330					335	
Ala	Leu	Leu	Gln	Phe	Thr	Ala	Glu	Phe	Ser	Ser	Arg	Tyr	Gly	Asp	Cys
			340					345					350		
His	Pro	Val	Phe	Phe	Ile	Gly	Ser	Leu	Glu	Ala	Ala	Phe	Gln	Glu	Ala
		355					360					365			
Phe	Tyr	Val	Lys	Ala	Arg	Asp	Arg	Lys	Leu	Leu	Ala	Ile	Tyr	Leu	His
	370					375					380				
His	Asp	Glu	Ser	Val	Leu	Thr	Asn	Val	Phe	Cys	Ser	Gln	Met	Leu	Cys
385				390						395					400
Ala	Glu	Ser	Ile	Val	Ser	Tyr	Leu	Ser	Gln	Asn	Phe	Ile	Thr	Trp	Ala
			405						410					415	
Trp	Asp	Leu	Thr	Lys	Asp	Ser	Asn	Arg	Ala	Arg	Phe	Leu	Thr	Met	Cys
			420					425					430		
Asn	Arg	His	Phe	Gly	Ser	Val	Val	Ala	Gln	Thr	Ile	Arg	Thr	Gln	Lys
		435					440					445			
Thr	Asp	Gln	Phe	Pro	Leu	Phe	Leu	Ile	Ile	Met	Gly	Lys	Arg	Ser	Ser
	450					455					460				
Asn	Glu	Val	Leu	Asn	Val	Ile	Gln	Gly	Asn	Thr	Thr	Val	Asp	Glu	Leu
465				470						475					480
Met	Met	Arg	Leu	Met	Ala	Ala	Met	Glu	Ile	Phe	Thr	Ala	Gln	Gln	Gln
			485						490					495	
Glu	Asp	Ile	Lys	Asp	Glu	Asp	Glu	Arg	Glu	Ala	Arg	Glu	Asn	Val	Lys
		500						505					510		
Arg	Glu	Gln	Asp	Glu	Ala	Tyr	Arg	Leu	Ser	Leu	Glu	Ala	Asp	Arg	Ala
		515					520					525			
Lys	Arg	Glu	Ala	His	Glu	Arg	Glu	Met	Ala	Glu	Gln	Phe	Arg	Leu	Glu
	530					535					540				
Gln	Ile	Arg	Lys	Glu	Gln	Glu	Glu	Glu	Arg	Glu	Ala	Ile	Arg	Leu	Ser
545				550						555					560
Leu	Glu	Gln	Ala	Leu	Pro	Pro	Glu	Pro	Lys	Glu	Glu	Asn	Ala	Glu	Pro
			565						570					575	
Val	Ser	Lys	Leu	Arg	Ile	Arg	Thr	Pro	Ser	Gly	Glu	Phe	Leu	Glu	Arg
		580					585						590		
Arg	Phe	Leu	Ala	Ser	Asn	Lys	Leu	Gln	Ile	Val	Phe	Asp	Phe	Val	Ala
	595					600					605				
Ser	Lys	Gly	Phe	Pro	Trp	Asp	Glu	Tyr	Lys	Leu	Leu	Ser	Thr	Phe	Pro
	610														

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<210> 6265
<211> 1344
<212> DNA
<213> Homo sapiens
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<400> 6265

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aacacctctg gtagtggaac aattcttata gatctgtctc ctgatgataa agagtttcag  
120  
tctgtggagg aagagatgca aagtacagtt cgagagcaca gagatggagg tcatgcaggt  
180  
ggaatcttca acagatacaa tattctcaag attcagaagg tttgtaacaa gaaactatgg  
240  
gaaagataca ctcaccggag aaaagaagtt tctgaagaaa accacaacca tgccaatgaa  
300  
cgaatgctat ttcattgggtc tccttttgtg aatgcaatta tccacaaagg ctttgatgaa  
360  
aggcatgcgt acatagggtg tatgtttgga gctggcattt attttgctga aaactcttcc  
420  
aaaagcaatc aatatgtata tggaattgga ggaggtactg ggtgtccagt tcacaaagac  
480  
agatcttgtt acatttgcca caggcagctg ctcttttgcc gggtaacctt gggaaagtct  
540  
ttcctgcagt tcagtgcaat gaaaatggca cattctcttc caggatcatca ctcatgact  
600  
ggtaggccca gtgtaaatgg cctagcatta gctgaatatg ttatttacag aggagaacag  
660  
gcttatcctg agtatttaat tacttaccag attatgaggc ctgaaggatg ggtcagtgga  
720  
taaatagtta ttttaagaaa ctaattccac tgaacctaaa atcatcaaag cagcagtgga  
780  
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960  
gttgtctgta ctaaattata aacagagtta acttgaacct tttatatgtt atgcattgat  
1020  
tctaacaac tgtaatgccc tcaacagaac taattttact aatacaatac tgtgttcttt  
1080  
aaaacacagc atttacactg aatacaattt catttgtaaa actgtaaata agagcttttg  
1140  
tactagccca gtattttatt acattgcttt gtaatatata tctgttttag aactgcagcg  
1200  
gtttacaaaa ttttttcata tgtattgttc atctatactt catcttacat cgtcatgatt  
1260  
gagtgatctt tacatttgat tccagaggct atgttcagtt gttagttggg aaagattgag  
1320  
ttatcagatt taatttgccg atgg  
1344

&lt;210&gt; 6266

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6266

Xaa Ala Leu Pro Ala Ser His Arg Pro Gly Gln Gln Gly Leu Asn Pro

1	5	10	15
Tyr Leu Thr Leu Asn Thr Ser Gly Ser Gly Thr Ile Leu Ile Asp Leu			
20	25	30	
Ser Pro Asp Asp Lys Glu Phe Gln Ser Val Glu Glu Glu Met Gln Ser			
35	40	45	
Thr Val Arg Glu His Arg Asp Gly Gly His Ala Gly Gly Ile Phe Asn			
50	55	60	
Arg Tyr Asn Ile Leu Lys Ile Gln Lys Val Cys Asn Lys Lys Leu Trp			
65	70	75	80
Glu Arg Tyr Thr His Arg Arg Lys Glu Val Ser Glu Glu Asn His Asn			
85	90	95	
His Ala Asn Glu Arg Met Leu Phe His Gly Ser Pro Phe Val Asn Ala			
100	105	110	
Ile Ile His Lys Gly Phe Asp Glu Arg His Ala Tyr Ile Gly Gly Met			
115	120	125	
Phe Gly Ala Gly Ile Tyr Phe Ala Glu Asn Ser Ser Lys Ser Asn Gln			
130	135	140	
Tyr Val Tyr Gly Ile Gly Gly Gly Thr Gly Cys Pro Val His Lys Asp			
145	150	155	160
Arg Ser Cys Tyr Ile Cys His Arg Gln Leu Leu Phe Cys Arg Val Thr			
165	170	175	
Leu Gly Lys Ser Phe Leu Gln Phe Ser Ala Met Lys Met Ala His Ser			
180	185	190	
Pro Pro Gly His His Ser Val Thr Gly Arg Pro Ser Val Asn Gly Leu			
195	200	205	
Ala Leu Ala Glu Tyr Val Ile Tyr Arg Gly Glu Gln Ala Tyr Pro Glu			
210	215	220	
Tyr Leu Ile Thr Tyr Gln Ile Met Arg Pro Glu Gly Met Val Asp Gly			
225	230	235	240

&lt;210&gt; 6267

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6267

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60

gggagagggg agggctaagc agagtgggga tgcccggcag tgaccagacc tctctcccca  
120

gatgagcctt tctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag  
180

atccatgacg aggaggtcct gcggctgctc tatgaggagg ccaagggcaa cgtgctggct  
240

gcacggtacc cgtgcgacgt ggaggactgc gaggctctgg gcgccctggt gtgccgcgtg  
300

cagcttgggc cctaccagcc cggccggc  
328

&lt;210&gt; 6268

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6268

Ala Glu Trp Gly Cys Pro Ala Val Thr Gln Pro Leu Ser Pro Asp Glu  
 1 5 10 15  
 Pro Phe Leu Gln Phe Arg Arg Asn Val Phe Phe Pro Lys Arg Arg Glu  
 20 25 30  
 Leu Gln Ile His Asp Glu Glu Val Leu Arg Leu Leu Tyr Glu Glu Ala  
 35 40 45  
 Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys  
 50 55 60  
 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln  
 65 70 75 80  
 Pro Gly Arg

&lt;210&gt; 6269

&lt;211&gt; 923

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6269

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 gcttttagatc aactgcggga cgtgattgag tctcaggagg aactaatcca ccagctgagg  
 120  
 aacgtgatgg ttctccagga cgaaaatttt gtcagtaaag aagagttcca ggcagtggag  
 180  
 aagaagctgg tggaagagaa agctgcccat gccaaaacca aggtcctcct ggccaaggaa  
 240  
 gaggagaagt tacagtttgc cctcggagag gtagagggtgc tatccaagca gctggagaaa  
 300  
 gagaagctgg cctttgaaaa agcgtctctc agtgtcaaga gcaaagtcct tcaggagtcc  
 360  
 agcaagaagg accagctcat caccaagtgc aatgagattg agtctcacat tataaagcaa  
 420  
 gaagatatac ttaatggcaa agagaatgag attaaagagt tgcagcaagt tatcagccag  
 480  
 cagaaacaga tcttcagccc accaccagcc ggctccgttg caggaatcac atgtctgact  
 540  
 tccggatcca gaagcagcag gaaagctaca tggcccaggt gctggaccag aagcataaga  
 600  
 aagcctcagg gacacgtcag gcccgagcc accagcatcc cagggaaaaa taaaatggcc  
 660  
 gccgctttcc tgttctctgg ctgtaatccc cagcctctgc cttctctgct ctgggagtcc  
 720  
 ccagcctcta gccctgcta ctccctccc tcttgatag tggtaggggt ccacaagggtg  
 780  
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 923

&lt;210&gt; 6270

<211> 307  
 <212> PRT  
 <213> Homo sapiens

<400> 6270

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Xaa Arg Lys Met Ala Thr Pro Leu Gly Trp Ser Lys Ala Gly Ser Gly
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Ser Val Cys Leu Ala Leu Asp Gln Leu Arg Asp Val Ile Glu Ser Gln
          20           25           30
Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
          35           40           45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
          50           55           60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
65          70          75          80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
          85          90          95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
          100         105         110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
          115         120         125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
          130         135         140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
145         150         155         160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
          165         170         175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
          180         185         190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
          195         200         205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
          210         215         220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
225         230         235         240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
          245         250         255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
          260         265         270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
          275         280         285
Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
          290         295         300
Leu Val Asn
305

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<210> 6271  
 <211> 1437  
 <212> DNA  
 <213> Homo sapiens

<400> 6271

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tgtggaggca cagttggtgc tatttttcaact tgtccactag aagtcattaa gacacgggtg  
 120  
 cagtcttcaa gattagctct cgggacagtc tactatcctc aggttcatct ggggaccatt  
 180  
 agtggagctg gaatggtgag accaacaatcc gtgacacctg gactctttca ggttctgaag  
 240  
 gctgtatact ttgcatgtta ctccaaagcc aaagagcaat ttaatggcat tttcgtgcct  
 300  
 aacagcaata ttgtgcatct tttctcagct ggctctgcag cttttatcac aaattcctta  
 360  
 atgaatccta tatggatggt taaaacccga atgcagctag aacagaaagt gaggggctct  
 420  
 aagcagatga atacactcca gtgtgctcgt tacgtttacc agaccgaagg cattcgtggc  
 480  
 ttctatagag gattaactgc ctctgtatgct ggaatttccg aaactataat ctgctttgct  
 540  
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 600  
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 660  
 tgtgcctcct gcattgctta tccacacgaa gtcataagga cgaggctccg ggaagagggc  
 720  
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 780  
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 840  
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 900  
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 960  
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 1020  
 ttggacattt ctttttggat tcatgctttc tggaagggtt aaattcatta acgttaatag  
 1080  
 ttaattataa cttttttttt aacttaagag gattcagggt taagcaccaa ctaaattaaa  
 1140  
 tcatgctatt taatttaagt atacatttgg cttgtgtcct cttttatgct cactatacta  
 1200  
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 1260  
 gagaatacaa cttgttttat aatctgactt taagatcttg cactgctaga cagggaagaa  
 1320  
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 1380  
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 1437

&lt;210&gt; 6272

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6272

Xaa Met Ala Thr Gly Gly Gln Gln Lys Glu Asn Thr Leu Leu His Leu



1	5	10	15
Phe Ala Gly Gly Cys Gly Gly Thr Val Gly Ala Ile Phe Thr Cys Pro			
20	25	30	
Leu Glu Val Ile Lys Thr Arg Leu Gln Ser Ser Arg Leu Ala Leu Arg			
35	40	45	
Thr Val Tyr Tyr Pro Gln Val His Leu Gly Thr Ile Ser Gly Ala Gly			
50	55	60	
Met Val Arg Pro Thr Ser Val Thr Pro Gly Leu Phe Gln Val Leu Lys			
65	70	75	80
Ala Val Tyr Phe Ala Cys Tyr Ser Lys Ala Lys Glu Gln Phe Asn Gly			
85	90	95	
Ile Phe Val Pro Asn Ser Asn Ile Val His Leu Phe Ser Ala Gly Ser			
100	105	110	
Ala Ala Phe Ile Thr Asn Ser Leu Met Asn Pro Ile Trp Met Val Lys			
115	120	125	
Thr Arg Met Gln Leu Glu Gln Lys Val Arg Gly Ser Lys Gln Met Asn			
130	135	140	
Thr Leu Gln Cys Ala Arg Tyr Val Tyr Gln Thr Glu Gly Ile Arg Gly			
145	150	155	160
Phe Tyr Arg Gly Leu Thr Ala Ser Tyr Ala Gly Ile Ser Glu Thr Ile			
165	170	175	
Ile Cys Phe Ala Ile Tyr Glu Ser Leu Lys Lys Tyr Leu Lys Glu Ala			
180	185	190	
Pro Leu Ala Ser Ser Ala Asn Gly Thr Glu Lys Asn Ser Thr Ser Phe			
195	200	205	
Phe Gly Leu Met Ala Ala Ala Leu Ser Lys Gly Cys Ala Ser Cys			
210	215	220	
Ile Ala Tyr Pro His Glu Val Ile Arg Thr Arg Leu Arg Glu Glu Gly			
225	230	235	240
Thr Lys Tyr Lys Ser Phe Val Gln Thr Ala Arg Leu Val Phe Arg Glu			
245	250	255	
Glu Gly Tyr Leu Ala Phe Tyr Arg Gly Leu Phe Ala Gln Leu Ile Arg			
260	265	270	
Gln Ile Pro Asn Thr Ala Ile Val Leu Ser Thr Tyr Glu Leu Ile Val			
275	280	285	
Tyr Leu Leu Glu Asp Arg Thr Gln			
290	295		

&lt;210&gt; 6273

&lt;211&gt; 2355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6273

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ccccagacat gccggtgttc acagagcaga tgatccagca ggagcagctg gactcgggtga
120
tggactggct caccaaccag ccgcggccgg cagctggtgg acaaggacag caccttcctc
180
agcacgctgg agcaccacct gagccgctac ctgaaggacg tgaagcagca ccacgtcaag
240
gctgacaagc gggacccaga gtttgtcttc tacgaccagc tgaagcaagt gatgaatgcg
300

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tacagagtca agccggccgt ctttgacctg ctccctggctg ttggcattgc tgcctacctc  
360  
ggcatggcct acgtggctgt ccagggtgagc agtgcccagg ctccagcactt cagcctcctc  
420  
tacaagaccg tccagaggct gctcgtgaag gccaagacac agtgacacag ccacccccac  
480  
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600  
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720  
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840  
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900  
tcctaggacg tccccctccg ctccccgatg gtggcgtgga catggttatt tatctctgct  
960  
ccttcttgcc tggaggaggg cagtgccagc cctgggggtc tgggattcca gccctcctgg  
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tgcatacccc agccttcccc ttctccgact gcagggtctg atgtcatcgt tgacagcctt  
1140  
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1200  
gttccccctgc actcctcttc tcccagcccc tccctccggc cctgtgcct ctgcggcccc  
1260  
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1320  
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1560  
aggacttggg gcatggctct ggggcacct tccctggaact cagagaggaa ggtccgggcc  
1620  
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1680  
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1740  
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&lt;210&gt; 6276

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6276

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&lt;210&gt; 6277

&lt;211&gt; 1206

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6277

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<211> 399

<212> PRT

<213> Homo sapiens

<400> 6278

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&lt;210&gt; 6279

&lt;211&gt; 2795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6279

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Lys Arg Asn Glu Asn Met Ala Lys Gly Leu His Arg Ala Leu Leu Gln
385          390          395          400
Gln Gln Pro Glu Asp Asp Ser Lys Arg Ser Pro Arg Pro Gln Asp Leu
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Ile Arg Leu Tyr Asp Ile Ile Leu Gln Asn Leu Val Glu Leu Leu Gln
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Leu Pro Gly Leu Glu Glu Asp Lys Ala Phe Gln Lys Glu Ile Gly Leu
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Lys Thr Leu Val Phe Lys Ala Tyr Arg Cys Phe Phe Ile Ala Gln Ser
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Tyr Val Leu Val Lys Lys Trp Ser Glu Ala Leu Val Leu Tyr Asp Arg
465          470          475          480
Val Leu Lys Tyr Ala Asn Glu Val Asn Ser Asp Ala Gly Ala Phe Lys
          485          490          495
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Gly Tyr Ile Lys Gly Ile Phe Gly Phe Arg Ser
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&lt;211&gt; 741

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6281

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 <212> PRT  
 <213> Homo sapiens

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&lt;210&gt; 6286

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6286

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Ala	Gly	Asn	Ile	Tyr	Leu	Gly	Thr	Ser	Pro	Pro	Ser	Gln	Glu	Pro	Ser
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&lt;210&gt; 6287

&lt;211&gt; 1674

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6287

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&lt;210&gt; 6288



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 <212> PRT  
 <213> Homo sapiens

<400> 6288  
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 Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile  
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 Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val  
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 Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val  
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 Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe  
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 <212> DNA  
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&lt;210&gt; 6290

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6290

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			20					25						30	
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				85					90					95		
Ser	Met	Leu	Asp	Ile	Asn	Ala	Leu	Phe	Ala	Glu	Ala	Lys	His	Tyr	His	
			100					105					110			
Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu	Lys	
		115					120					125				
Thr	Ser	Lys	Leu	Lys	Lys	Arg	Ala	Leu	Lys	Leu	Gln	Gln	Lys	Arg	Gln	
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Lys	Glu	Glu	Leu	Glu	Arg	Glu	Gln	Gln	Arg	Glu	Lys	Gly	Phe	Glu	Arg	
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Glu	Lys	Gln	Leu	Thr	Ala	Arg	Pro	Ala	Lys	Arg	Met					
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&lt;210&gt; 6291

&lt;211&gt; 2718

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6291

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tgcccagggg cacgaagcca tctgtgggca ggcagggtgc tcaggagcta acctgtctt  
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2580  
tcgcttgggc atcctctgtg ggaccttag aaagtctccc ctttctgggc cgcagttttc  
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<210> 6292

<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

Xaa	Val	Val	Leu	Ala	Gly	Gly	Val	Ala	Pro	Ala	Leu	Phe	Arg	Gly	Met	1	5	10	15
Pro	Ala	His	Phe	Ser	Asp	Ser	Ala	Gln	Thr	Glu	Ala	Cys	Tyr	His	Met	20	25	30	
Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	Gln	Arg	Leu	35	40	45	
Pro	Arg	Pro	Ser	Ser	Leu	Ser	Asp	Lys	Thr	Gln	Leu	His	Ser	Arg	Trp	50	55	60	
Leu	Asp	Ser	Ser	Arg	Cys	Leu	Met	Gln	Gln	Gly	Ile	Lys	Ala	Gly	Asp	65	70	75	80
Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asp	Pro	85	90	95	
Lys	Thr	Asp	Pro	Val	Arg	Leu	Thr	Gln	Leu	Tyr	Glu	Gln	Ala	Arg	Trp	100	105	110	
Asp	Leu	Leu	Glu	Glu	Ile	Asp	Cys	Thr	Glu	Glu	Glu	Met	Met	Val		115	120	125	
Phe	Ala	Ala	Leu	Gln	Tyr	His	Ile	Asn	Lys	Leu	Ser	Gln	Ser	Gly	Glu	130	135	140	
Val	Gly	Glu	Pro	Ala	Gly	Thr	Asp	Pro	Gly	Leu	Asp	Asp	Leu	Asp	Val	145	150	155	160
Ala	Leu	Ser	Asn	Leu	Glu	Val	Lys	Leu	Glu	Gly	Ser	Ala	Pro	Thr	Asp	165	170	175	
Val	Leu	Asp	Ser	Leu	Thr	Thr	Ile	Pro	Glu	Leu	Lys	Asp	Tyr	Leu	Arg	180	185	190	
Ile	Phe	Arg	Pro	Arg	Lys	Leu	Thr	Leu	Lys	Gly	Tyr	Arg	Gln	His	Trp	195	200	205	
Val	Val	Phe	Lys	Glu	Thr	Thr	Leu	Ser	Tyr	Tyr	Lys	Ser	Gln	Asp	Glu	210	215	220	
Ala	Pro	Gly	Asp	Pro	Ile	Gln	Gln	Leu	Asn	Leu	Lys	Gly	Cys	Glu	Val	225	230	235	240
Val	Pro	Asp	Val	Asn	Val	Ser	Gly	Gln	Lys	Phe	Cys	Ile	Lys	Leu	Leu	245	250	255	
Val	Pro	Ser	Pro	Glu	Gly	Met	Ser	Glu	Ile	Tyr	Leu	Arg	Cys	Gln	Asp	260	265	270	
Glu	Gln	Gln	Tyr	Ala	Arg	Trp	Met	Ala	Gly	Cys	Arg	Leu	Ala	Ser	Lys	275	280	285	
Gly	Arg	Thr	Met	Ala	Asp	Ser	Ser	Tyr	Thr	Ser	Glu	Val	Gln	Ala	Ile	290	295	300	
Leu	Ala	Phe	Leu	Ser	Leu	Gln	His	Gly	Gln	Trp	Gly	Pro	Arg	Gln	Pro	305	310	315	320
Pro	Pro	Arg	Pro	Asp	Ala	Ser	Ala	Glu	Gly	Leu	Asn	Pro	Tyr	Gly	Leu	325	330	335	
Val	Ala	Pro	Arg	Phe	Gln	Arg	Lys	Phe	Lys	Ala	Lys	Gln	Leu	Thr	Pro				

340 345 350  
 Arg Ile Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu Ala Glu  
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 Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp Phe Gly  
 370 375 380  
 Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile  
 385 390 395 400  
 Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly  
 405 410 415  
 Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val  
 420 425 430  
 Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His Ile Asn  
 435 440 445  
 Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr  
 450 455 460  
 Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg Gly Glu  
 465 470 475 480  
 Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His Glu Ala  
 485 490 495  
 Phe

&lt;210&gt; 6293

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6293

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 180  
 tcgcagaagt cccgggcaga gctgggtgggg cagcttcaga ggctgggatt tgacatctct  
 240  
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 660  
 gtgggcgacg tcggcggtgc ccagcgggtg ggaatgagag cgctgcaggt gcgcaccggg  
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 750

<210> 6294  
 <211> 250  
 <212> PRT  
 <213> Homo sapiens

<400> 6294  
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 Gly Gly Thr Ala Ile Ala Gly Ser Val Glu Ala Val Ala Arg Leu Lys  
 35 40 45  
 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser  
 50 55 60  
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser  
 65 70 75 80  
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys  
 85 90 95  
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser  
 100 105 110  
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala  
 115 120 125  
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln  
 130 135 140  
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly  
 145 150 155 160  
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr  
 165 170 175  
 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly  
 180 185 190  
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val  
 195 200 205  
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val  
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 Gly Gly Ala Gln Arg Cys Gly Met Arg Ala Leu Gln Val Arg Thr Gly  
 225 230 235 240  
 Lys Phe Arg Pro Ser Asp Glu His His Pro  
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<210> 6295  
 <211> 2091  
 <212> DNA  
 <213> Homo sapiens

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 120  
 cgccgcgcgg cagccctccg gctgtggggc cgggtagttg aacgggtcga ggccggggga  
 180  
 ggcgtggggc cgtttcaggc ctgcggctgt cggctggtgc ttggcggcag ggacgatgtg  
 240

agtgcggggc tgagaggcag ccatggggcc cgcggtgagc ccttggaacc ggcgcgcccc  
300  
ttgcagaggc ctcccagacc cgagggtgccc agggcattcc ggaggcagcc gagggcagca  
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420  
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480  
gatgtagctg agctgattcg ggccagagcc tgccagaggg tggtggtcat ggtggggggc  
540  
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aacctccagc agtacgatct cccgtacccc gagggcattt ttgaactccc attcttcttt  
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720  
aacgtcactc actactttct ccggtgctt catgacaagg ggctgcttct gcggctctac  
780  
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gccgtgcgga cgtcagttcc ccgactgctc atcaaccggg acttggtggg gcccttggct  
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1680  
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1740  
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1800  
aaaaagcttt cttctgactg tgacctctt gaactgaatc agaccaactg gaatcccaga  
1860



ccgagtcctgc tttctgtgcc tagttgaacg gcaagctcgg catctgttgg ttacaagatc  
 1920  
 cagacttggg ccgagcgggc cccagccctc ttcattgttc gaagtgtagt cttgaggccc  
 1980  
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 2091

<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

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			20					25					30		
Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala
		35					40					45			
Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala
	50					55					60				
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg
65					70					75					80
Arg	Gln	Pro	Arg	Ala	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys
				85					90					95	
Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val
			100					105					110		
Gly	Ser	Gly	Gly	Ser	Ser	Asp	Lys	Gly	Lys	Leu	Ser	Leu	Gln	Asp	Val
		115					120					125			
Ala	Glu	Leu	Ile	Arg	Ala	Arg	Ala	Cys	Gln	Arg	Val	Val	Val	Met	Val
	130					135					140				
Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro
145					150					155					160
Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro
			165					170						175	
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe	
			180					185				190			
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val
		195					200					205			
Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg
	210					215					220				
Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro
225					230					235					240
Ala	Ser	Lys	Leu	Val	Glu	Ala	His	Gly	Thr	Phe	Ala	Ser	Ala	Thr	Cys
			245						250					255	
Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val
		260						265					270		
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys
	275						280					285			
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu
	290					295					300				
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr

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305          310          315          320
Ser Leu Glu Val Glu Pro Phe Ala Ser Leu Thr Glu Ala Val Arg Ser
          325          330          335
Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
          340          345          350
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
          355          360          365
Gly Val Glu Ser Leu Val Glu Leu Leu Gly Trp Thr Glu Glu Met Arg
          370          375          380
Asp Leu Val Gln Arg Glu Thr Gly Lys Leu Asp Gly Pro Asp Lys
385          390          395

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<210> 6297  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

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<400> 6297
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120
ttcggaagcc cgttcggcct ggaggagccg cagtgggtcc cggacaagga gtgtcggaga
180
tgtatgcagt gtgacgcca gtttgacttt ctcaccagaa agcaccactg tcgccgtgtc
240
gggaagtgtc tctgcgacag gtgctgcagc cagaaggtgc cgctgcggcg catgtgtctt
300
gtggaccccc tgccgcagtg cgcggagtgc gccctggtgt ccctcaagga ggcggagttc
360
tacgacaagc agctcaaagt gctcctgagc ggtaaggacg ggtgtcctgc acagtctctg
420
gcgctccgcc agccggctcc tcgtgtctgt ggcgatgctg tgggctgtgc ac
472

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<210> 6298  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

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<400> 6298
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1      5      10      15
Ser Pro Ser Gly Leu Arg Met Val Pro Glu His Arg Ala Phe Gly Ser
20     25     30
Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
35     40     45
Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
50     55     60
His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
65     70     75     80
Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
85     90     95
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

```

	100		105		110										
Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
	115						120					125			
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
	130					135						140			
Cys	Ala														
145															

&lt;210&gt; 6299

&lt;211&gt; 1466

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6299

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gcccatctcc gcgctggaga gcgatgcggc caagccagcg gagggccccg acgctcccgga
120
ggcggccagc ccgcccattg gccagggag agcctgggtt tgtaccactg gaccagttcc
180
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240
gacgtgagcc tgccacagag cgagcacaag gagccctggg tcatgcggct caacctgggc
300
gaggaggtgc ccgtcatcat ccaccgcgac aacatcatca gtgactatga ccagatcatt
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420
agcctgcagc acgcacgggt gctgcagtag cgggagctgc tggacgcact gcccatggat
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1080
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1140
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1200

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 aaaacattcc gtagtttaga agtagacgtt gcaaattgctg tgactcaagg ccacggctct  
 1320  
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 1380  
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 1440  
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 1466

<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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Leu	Gln	Leu	Val	Ala	His	Leu	Arg	Ala	Gly	Glu	Arg	Cys	Gly	Gln	Ala
			20					25					30		
Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
			35				40					45			
Arg	Glu	Ser	Leu	Val	Leu	Tyr	His	Trp	Thr	Gln	Ser	Phe	Ser	Ser	Gln
	50					55					60				
Lys	Val	Arg	Leu	Val	Ile	Ala	Glu	Lys	Gly	Leu	Val	Cys	Glu	Glu	Arg
65					70					75					80
Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
				85					90					95	
Leu	Asn	Leu	Gly	Glu	Glu	Val	Pro	Val	Ile	Ile	His	Arg	Asp	Asn	Ile
			100					105					110		
Ile	Ser	Asp	Tyr	Asp	Gln	Ile	Ile	Asp	Tyr	Val	Glu	Arg	Thr	Phe	Thr
		115				120						125			
Gly	Glu	His	Val	Val	Ala	Leu	Met	Pro	Glu	Val	Gly	Ser	Leu	Gln	His
		130				135					140				
Ala	Arg	Val	Leu	Gln	Tyr	Arg	Glu	Leu	Leu	Asp	Ala	Leu	Pro	Met	Asp
145					150					155					160
Ala	Tyr	Thr	His	Gly	Cys	Ile	Leu	His	Pro	Glu	Leu	Thr	Thr	Asp	Ser
				165					170					175	
Met	Ile	Pro	Lys	Tyr	Ala	Thr	Ala	Glu	Ile	Arg	Arg	His	Leu	Ala	Asn
			180					185					190		
Ala	Thr	Thr	Asp	Leu	Met	Lys	Leu	Asp	His	Glu	Glu	Glu	Pro	Gln	Leu
			195				200					205			
Ser	Glu	Pro	Tyr	Leu	Ser	Lys	Gln	Lys	Lys	Leu	Met	Ala	Lys	Ile	Leu
	210					215					220				
Glu	His	Asp	Asp	Val	Ser	Tyr	Leu	Lys	Lys	Ile	Leu	Gly	Glu	Leu	Ala
225					230					235					240
Met	Val	Leu	Asp	Gln	Ile	Glu	Ala	Glu	Leu	Glu	Lys	Arg	Lys	Leu	Glu
				245				250						255	
Asn	Glu	Gly	Gln	Lys	Cys	Glu	Leu	Trp	Leu	Cys	Gly	Cys	Ala	Phe	Thr
			260					265					270		
Leu	Ala	Asp	Val	Leu	Leu	Gly	Ala	Thr	Leu	His	Arg	Leu	Lys	Phe	Leu
		275					280					285			
Gly	Leu	Ser	Lys	Lys	Tyr	Trp	Glu	Asp	Gly	Ser	Arg	Pro	Asn	Leu	Gln

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305              310              315              320
Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe
      325              330              335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu
      340              345              350
Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys
      355              360              365
Lys Lys Tyr Ile
      370

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<210> 6301  
 <211> 911  
 <212> DNA  
 <213> Homo sapiens

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<210> 6302  
 <211> 202  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6302

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 20           25           30
Glu Ser Leu Lys Lys Lys Ile Gln Pro Lys Leu Ser Leu Thr Leu Ser
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Ser Ser Val Ser Arg Gly Asn Val Ser Thr Pro Pro Arg His Ser Ser
 50           55           60
Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
 65           70           75           80
Phe Arg Ser Ser Thr Pro Thr Gly Ser Glu Tyr Asp Glu Glu Glu Val
 85           90           95
Asp Tyr Glu Glu Ser Asp Ser Asp Glu Ser Trp Thr Thr Glu Ser Ala
100           105           110
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Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
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Asn Val Asn Gly Ile Lys Tyr His Ala Lys Asn Gly His Arg Thr Gln
145           150           155           160
Ile Arg Val Arg Lys Pro Phe Lys Cys Arg Cys Gly Lys Ser Tyr Lys
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Thr Ala Gln Gly Leu Arg His His Thr Ile Asn Phe His Pro Pro Val
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Ser Ala Glu Ile Ile Arg Lys Met Gln Gln
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&lt;210&gt; 6303

&lt;211&gt; 676

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6303

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540

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<210> 6304  
 <211> 181  
 <212> PRT  
 <213> Homo sapiens

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                   20                  25                  30  
 Val Phe Val Glu Ser Ser Glu Thr Leu Asp Tyr Gln Met Ala Phe Ala  
                   35                  40                  45  
 Asp Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg  
   50                  55                  60  
 Leu Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg  
 65                  70                  75                  80  
 Thr Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp  
                   85                  90                  95  
 Cys Glu Arg Val Lys Gly Pro Val Gly Ser Leu Lys Ser Val Glu Ala  
                   100                  105                  110  
 Ile Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln  
                   115                  120                  125  
 Gln Gln Asp Gly Asp Asn Gly Asp Ser Ser Lys Ser Thr Glu Thr Ser  
   130                  135                  140  
 Asp Phe Glu Asn Ile Glu Ser Pro Leu Asn Glu Arg Asp Ser Ser Ala  
 145                  150                  155                  160  
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 Glu Lys Phe Ser Val  
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<210> 6305  
 <211> 3853  
 <212> DNA  
 <213> Homo sapiens

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<210> 6306

<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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			20					25					30		
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Ile	Val	Glu	Ala	Ser	Gly	Gly	Gly	Ala	Phe	Leu	Val	Leu	Pro	Leu	Ser
	50				55						60				
Lys	Thr	Gly	Arg	Ile	Asp	Lys	Ala	Tyr	Pro	Thr	Val	Cys	Gly	His	Thr
65				70					75					80	
Gly	Pro	Val	Leu	Asp	Ile	Asp	Trp	Cys	Pro	His	Asn	Asp	Gln	Val	Ile
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Ala	Ser	Gly	Ser	Glu	Asp	Cys	Thr	Val	Met	Val	Trp	Gln	Ile	Pro	Glu
			100					105					110		
Asn	Gly	Leu	Thr	Ser	Pro	Leu	Thr	Glu	Pro	Val	Val	Val	Leu	Glu	Gly
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His	Thr	Lys	Arg	Val	Gly	Ile	Ile	Ala	Trp	His	Pro	Thr	Ala	Arg	Asn
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Val	Leu	Leu	Ser	Ala	Gly	Cys	Asp	Asn	Val	Val	Leu	Ile	Trp	Asn	Val
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Gly	Thr	Ala	Glu	Glu	Leu	Tyr	Arg	Leu	Asp	Ser	Leu	His	Pro	Asp	Leu
			165					170					175		
Ile	Tyr	Asn	Val	Ser	Trp	Asn	His	Asn	Gly	Ser	Leu	Phe	Cys	Ser	Ala
		180				185							190		
Cys	Lys	Asp	Lys	Ser	Val	Arg	Ile	Ile	Asp	Pro	Arg	Arg	Gly	Thr	Leu
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Val	Ala	Glu	Arg	Glu	Lys	Ala	His	Glu	Gly	Ala	Arg	Pro	Met	Arg	Ala
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Ile	Phe	Leu	Ala	Asp	Gly	Lys	Val	Phe	Thr	Thr	Gly	Phe	Ser	Arg	Met
225				230					235					240	
Ser	Glu	Arg	Gln	Leu	Ala	Leu	Trp	Asn	Pro	Lys	Asn	Met	Gln	Glu	Pro
			245					250					255		
Ile	Ala	Leu	His	Glu	Met	Asp	Thr	Ser	Asn	Gly	Val	Leu	Leu	Pro	Phe
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Tyr	Asp	Pro	Asp	Thr	Ser	Ile	Ile	Tyr	Leu	Cys	Gly	Lys	Gly	Asp	Ser

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<210> 6307
<211> 2119
<212> DNA
<213> Homo sapiens
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660

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&lt;210&gt; 6308

&lt;211&gt; 483

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6308

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Trp Gln Ser Tyr Leu Gln Gly Gln Met Ile Ser Ala Glu Asp Cys Glu
      35           40           45
Phe Ile Gln Arg Phe Glu Met Lys Arg Ser Pro Glu Glu Lys Gln Glu
      50           55           60
Met Leu Gln Thr Glu Gly Ser Gln Cys Ala Lys Thr Phe Ile Asn Leu
65           70           75           80
Met Thr His Ile Cys Lys Glu Gln Thr Val Gln Tyr Ile Leu Thr Met
      85           90           95
Val Asp Asp Met Leu Gln Glu Asn His Gln Arg Val Ser Ile Phe Phe
      100          105          110
Asp Tyr Ala Arg Cys Ser Lys Asn Thr Ala Trp Pro Tyr Phe Leu Pro
      115          120          125
Met Leu Asn Arg Gln Asp Pro Phe Thr Val His Met Ala Ala Arg Ile
      130          135          140
Ile Ala Lys Leu Ala Ala Trp Gly Lys Glu Leu Met Glu Gly Ser Asp
      145          150          155          160
Leu Asn Tyr Tyr Phe Asn Trp Ile Lys Thr Gln Leu Ser Ser Gln Lys
      165          170          175
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Asp Ser Ser Gln Tyr Val Gln Cys Val Ala Gly Cys Leu Gln Leu Met
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Asn Cys Ile Met Gly Val Leu Ser Asn Lys Cys Gly Phe Gln Leu Gln
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Tyr Gln Met Ile Phe Ser Ile Trp Leu Leu Ala Phe Ser Pro Gln Met
      245          250          255
Cys Glu His Leu Arg Arg Tyr Asn Ile Ile Pro Val Leu Ser Asp Ile
      260          265          270
Leu Gln Glu Ser Val Lys Glu Lys Val Thr Arg Ile Ile Leu Ala Ala
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Phe Arg Asn Phe Leu Glu Lys Ser Thr Glu Arg Glu Thr Arg Gln Glu
      290          295          300
Tyr Ala Leu Ala Met Ile Gln Cys Lys Val Leu Lys Gln Leu Glu Asn
      305          310          315          320
Leu Glu Gln Gln Lys Tyr Asp Asp Glu Asp Ile Ser Glu Asp Ile Lys
      325          330          335
Phe Leu Leu Glu Lys Leu Gly Glu Ser Val Gln Asp Leu Ser Ser Phe
      340          345          350
Asp Glu Tyr Ser Ser Glu Leu Lys Ser Gly Arg Leu Glu Trp Ser Pro
      355          360          365
Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn
      370          375          380
Glu Lys Asn Tyr Glu Leu Leu Lys Ile Leu Thr Lys Leu Leu Glu Val
      385          390          395          400
Ser Asp Asp Pro Gln Val Leu Ala Val Ala Ala His Asp Val Gly Glu

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Tyr Val Arg His Tyr Pro Arg Gly Lys Arg Val Ile Glu Gln Leu Gly
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Arg Tyr Asn Ala Leu Leu Ala Val Gln Lys Leu Met Val His Asn Trp
                450                455                460
Glu Tyr Leu Gly Lys Gln Leu Gln Ser Glu Gln Pro Gln Thr Ala Ala
465                470                475                480
Ala Arg Ser

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&lt;210&gt; 6309

&lt;211&gt; 564

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6309

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**What is claimed is:**

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
  - a) the nucleic acid of claim 1;
  - b) the polypeptide of claim 10; and
  - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said



compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject an antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.

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(54) Title: NUCLEIC ACIDS INCLUDING OPEN READING FRAMES ENCODING POLYPEPTIDES; "ORFX"

(57) Abstract: The present invention provides open reading frames encoding isolated polypeptides, as well as polynucleotides en-  
coding ORFX and antibodies that immunospecifically bind to ORFX or any derivative, variant, mutant, or fragment of the ORFX  
polypeptides, polynucleotides or antibodies. The invention additionally provides methods in which the ORFX polypeptide, polynu-  
cleotide and antibody are used in detection and treatment of a broad range of pathological states, as well as to other uses.

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 00/08621

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C12N15/12 C07K14/47 C07K16/18 G01N33/566 C12Q1/68  
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C12N C07K G01N A01K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EMBASE, MEDLINE, CAB Data, PAJ, EPO-Internal, WPI Data, STRAND

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	COLE S.T.: "Deciphering the biology of Mycobacterium tuberculosis from the complete genome sequence." NATURE, vol. 393, 11 June 1998 (1998-06-11), XP002144873 sequence	
A	LAMERDIN J.E.: "Sequence analysis of a 3.5 Mb contig in human 19p13.3 containing a serine protease gene cluster." EMEST DATABASE ENTRY, 8 February 1999 (1999-02-08), XP002144874 sequence	

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

### \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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Date of the actual completion of the international search

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# INTERNATIONAL SEARCH REPORT

Internat. Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	<p>M.D. ADAMS ET AL.: "The genome sequence of <i>Drosophila melanogaster</i>."  SCIENCE,  vol. 287, 24 March 2000 (2000-03-24),  pages 2185-2195, XP002144875  the whole document  -----</p>	6

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 00/08621

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 27 to 32 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
  
claims 1 to 32 partially

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.



## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claim : 1 to 32 partially

Isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from a group consisting of SEQ ID NO 2n wherein n is 1, oligonucleotides less than 100 nucleotides in length and comprising at least 6 contiguous nucleotides from the above sequence, polypeptides encoded by said nucleotides, antibodies that bind to said polypeptide, pharmaceutical composition comprising said polypeptide and methods of detection, screening, therapeutic uses involving said polypeptide.

2. Claim : .

Inventions 2 to 3161

claims 1 to 32 partially :

Isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from a group consisting of SEQ ID NO 2n wherein n is 2 to 3161, oligonucleotides less than 100 nucleotides in length and comprising at least 6 contiguous nucleotides from the above sequence, polypeptides encoded by said nucleotides, antibodies that bind to said polypeptide, pharmaceutical composition comprising said polypeptide and methods of detection, screening, therapeutic uses involving said polypeptide.

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